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Information Systems

INFORMATION SYSTEMS PROGRAM MANAGEMENT AND ACQUISITION

INFORMATION SYSTEMS PROGRAM MANAGEMENT

This regulation provides policy to activities requiring, implementing, supporting, or acquiring information systems capabilities as defined in AFR 700-1, Managing Air Force Information Systems. This regulation is one of the information systems publications prescribed by AFR 700-12, Developing and Processing Information Systems Publications, and applies to all organizations in the Air Force, Air Reserve Forces, and other agencies involved in acquiring information systems capabilities through Air Force channels.

The term major command (MAJCOM) as used in this regulation includes separate operating agencies and direct reporting units. Send recommended changes to the Air Force Information Systems Doctrine Office (AFISDO), Keesler AFB, MS 39534-6340, with an information copy to HQ USAF/SIM, Wash DC 20330-5190. Direct minor problems to AFISDO by telephone (AUTOVON 868-3410). MAJCOMs must forward a published copy of all supplements to HQ USAF/SIM and AFISDO.

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Chapter 1

PROGRAM MANAGEMENT CONCEPTS AND RESPONSIBILITIES

Section A—Program Management Concepts

1-1. Introduction. This regulation defines the program management disciplines used for information systems that are developed under the policies outlined in AFR 700-1. Because of the wide range of programs and priorities, program managers must tailor the program management process to meet the needs of their various programs and still perform all required tasks. Volume I of this regulation addresses the most common actions required for program management of an information system. Volume II supplements the information in Volume I by addressing the acquisition actions required for various types of information systems. When used together, these two volumes will allow program management to combine and organize resources to satisfy an information systems requirement. Program management is necessary for all information systems. However, all program participants must keep paperwork to a minimum. For very small programs, such as acquisition and installation of a microcomputer, the program management documentation may be only a few pages which incorporate the Information Systems Requirements Document (ISRD), Information Systems Directive (ISD), and Information Systems Program Plan (ISPP) in a single document. Very large programs such as Phase IV may require even more documentation than outlined in this publication. Program management actions include obtaining and installing equipment and software; testing, accepting, and commissioning systems; securing manpower and training; budgeting for life cycle O&M expenditures; and acquiring ancillary support such as test equipment and technical data. Program management requires interaction among many supporting activities as identified in the ISD, the Program Manager Charter, and the ISPP. Program management runs concurrently with the Planning, Programming, and Budgeting System (PPBS) process covered in AFR 700-3, Information Systems Requirements Processing. Program management begins when an implementing agency gets an ISRD or HQ USAF Program Management Directive (PMD) and ends with transfer of the equipment and software support responsibility to the operating activity. The intent of this regulation is to provide the policy and direction to ensure effective program management with a minimum of documentation.

1-2. Objectives. The information system program management process seeks to:

- a. Establish a control mechanism to make sure that an information systems requirement is satisfied by delivering a product on time which fulfills the requirement.
- b. Make sure that when an information system is operational it not only meets its stated need but will be supportable throughout its life cycle.

1-3. Primary Management Functions. Program management involves obtaining, delivering, and supporting the resources needed to satisfy the requirement. The program manager must make sure certain primary management functions are performed in order to manage, develop, and implement information systems in the most economical, effective, and efficient manner possible. These functions are program baselining, system engineering, configuration management, technical control, and test and evaluation management.

a. Program Baselining. Program baselining enhances stability and controls cost growth of selected programs. It requires preparation of a program baseline document which describes the program requirements, the program content to satisfy these requirements, and the approved fiscal resources with which the program will be accomplished. The HQ USAF Assistant Chief of Staff for Information Systems designates information systems programs which will be managed under a HQ USAF program baseline. Information systems acquisition programs so designated will be baselined in accordance with AFR 800-25, Acquisition Program Management. Other programs directed by PMD or ISD which have annual costs exceeding \$5 million will be baselined at the MAJCOM level in accordance with AFR 800-25. For MAJCOM-level baselines, the HQ USAF approval and processing provisions in AFR 800-25 do not apply. All program participants will help develop and maintain the program baseline document identified in AFR 800-25. The implementing activity will keep the program baseline and any changes on file and may submit the baseline to HQ USAF in support of the PPBS.

b. Systems Engineering. Systems engineering defines the total system so the design will reflect integrated requirements for equipment, computer programs, facilities, logistics support, procedural data, and personnel. It provides the source requirement data for development of specifications, test plans, and procedures. It also provides data required to define, contract for, design, develop, produce, install, and train personnel to test, operate, and support the system.

c. Configuration Management. Configuration management is one of the most important functions a program manager must perform. Configuration management identifies, controls, accounts for, and audits the functional and physical characteristics of an information system. Configuration management is explained in AFR 65-3, Configuration Management, and will be carefully tailored to the size, scope, and complexity of the information system. Configuration management is applied to all elements of a system—equipment, software, facilities, and documentation. Configuration management is applied through baseline management which is the process of establishing reference points from which to control changes. The technical foundation for program baselining is a

result of configuration management. Configuration management consists of:

(1) **Configuration Identification.** Configuration identification refers to the technical documentation which identifies or describes the system. Configuration identification is the basis for configuration control and status accounting. In the early stages of program management, configuration identification is usually limited to the system specification. At delivery of the system, configuration identification will consist of the collective documentation available to describe the system. Configuration identification ensures the definition of the functional, allocated, and product baselines.

(a) **Functional Baseline.** The functional baseline will be a product of the conceptual effort and is usually the first baseline. It is established by authenticating the system specification against the functional requirement.

(b) **Allocated Baseline.** The allocated baseline will be established during system development and will consist primarily of performance-oriented specifications and interface requirements.

(c) **Product Baseline.** The product baseline is established by authenticating the product specifications. The product specifications are the detailed "build-to" technical requirements.

(2) **Configuration Control.** Configuration control is the major configuration management function. It is the process of documenting changes to established baselines to provide program management visibility at any time. When a baseline is established, all changes must be identified and documented. Although a change viewed alone may seem minor, the vast number of changes (hundreds per week in a complex system) require orderly procedures and careful bookkeeping to maintain knowledge and control of the actual configuration.

(a) **Classes of Changes.** Changes in configuration are controlled by classifying and processing the changes as Class I or Class II changes per MIL-STD-480 (attachment 1). When the product baseline is established, all changes will be processed as Class I.

(b) **Configuration Control Board.** The configuration control board (CCB) evaluates, processes, and approves or disapproves changes to the baselines. The program manager chairs the CCB and makes the final decision on any changes. The CCB decision is documented by CCB directive.

(3) **Configuration Status Accounting.** Configuration status accounting is the process of recording and reporting the status of an evolving system. It documents actions resulting from changes which affect configuration items of a system. This documentation normally contains the approved configuration (configuration identification index) and the current configuration (configuration status accounting report). The identification indexing and accounting functions identify the initial approved configuration then continuously tracks the proposed changes to that configuration as well as the priority, schedule, and progress of approved changes.

(4) **Configuration Audits.** Configuration audits verify conformance to specifications and contract requirements. Audits are not reviews (paragraph 1-3c). Use figure 3-2 as a

guide for determining when audits are needed and when reviews must be conducted.

d. Technical Control. Technical control includes planning for and controlling the technical tasks required to progress from user need or requirement to the implementation and operation of an information system. Formal technical control is accomplished by technical reviews and configuration audits. Informal technical control is accomplished through periodic technical interchange meetings and independent reviews.

(1) **Reviews.** Reviews ensure visibility and technical understanding and verify that the design satisfies the requirement. Reviews are part of the systems engineering process which is a logical sequence of activities and decisions for developing an information system.

(a) **System Requirements Review (SRR).** This review determines the initial design effort and ensures the design is responsive to the user's stated requirement. It is conducted after a significant portion of the functional requirements are defined and before establishing the functional baseline.

(b) **System Design Review (SDR).** This review is conducted when the design effort has progressed to the point where the system characteristics and the design approach are defined and configuration items are identified. It usually establishes the allocated baseline.

(c) **Preliminary Design Review (PDR).** The review is conducted on each configuration item to evaluate the progress and technical adequacy of the selected design approach. This review is held after the allocated baseline is established.

(d) **Critical Design Review (CDR).** This review is conducted when the detail design is complete and fabrication drawings are ready for release. Normally, the CDR is conducted prior to algorithms being translated to coded instructions. The review verifies that the detail design satisfies the design definition set forth in the allocated baseline.

(e) **Product Verification Review (PVR).** This review is conducted to approve the product baseline for each configuration item and to make sure that preparations for testing have been completed. Both audits discussed below must be conducted before this review.

(2) **Audits.** Audits validate achievement of development requirements and identify a product configuration by comparing the configuration item with its technical documentation. The following two audits will be performed:

(a) **Functional Configuration Audit (FCA).** This audit validates the satisfactory development of a configuration item and ensures it functions as required. It assures that the technical documentation accurately reflects the functional and physical characteristics of the configuration item. It verifies that the item meets the performance requirements specified in the functional and allocated baselines.

(b) **Physical Configuration Audit (PCA).** This audit establishes the product baseline and is used for production and acceptance of configuration items.

e. Test Management. The principles of AFR 80-14, Test and Evaluation, can be applied to testing information systems resources. Tests and evaluations that make up test management are:

(1) **Development Test and Evaluation (DT&E).** DT&E evaluates the technology, design, and engineering of the information system. DT&E is divided into two areas, configuration item tests and system-level tests:

(a) The objective of configuration item testing is to qualify each information system configuration item for entry into the system tests. This qualification is accomplished by verifying that the configuration item meets performance and design requirements. If contractors are involved, contractor personnel will normally conduct the testing. The program manager designates representatives to monitor test progress, performance of the equipment and software and to ensure adherence to test procedures and the validity of collected data.

(b) The objective of the system-level DT&E is the formal qualification of the system. It is conducted according to the system level portion of the plan and assures the integration of all configuration items and other systems components into a complete system. It includes development tests of the completed system in as near an operational configuration and environment as practical. The implementing command conducts DT&E with appropriate participation by the contractor and the supporting and using commands.

(2) **Operational Test and Evaluation (OT&E).** OT&E determines that the system will satisfactorily perform the functions for which it is designed in the mission environment. OT&E may overlap certain phases of DT&E. OT&E will normally be conducted by the Air Force Operational Test and Evaluation Center (AFOTEC) or the using command, with support of the implementing and supporting commands. The responsibilities of AFOTEC are specified in AFR 23-36, Air Force Test and Evaluation Center.

1-4. Relationships. Figure 1-1 shows the relationship of processes described in AFR 700-3 and this regulation. Figure 1-2 shows an example of a program strategy. These figures are presented as examples only and should not be construed as the only acceptable program strategy to be followed. (See the policy statement on tailoring and flexibility in paragraph 1-1.)

1-5. Terms Explained. Refer to attachment 1 for an explanation of terms used in this regulation.

Section B—Responsibilities

1-6. Implementing Activity Responsibilities. The implementing activity assumes program management responsibility upon receiving an approved ISD or PMD, assigning them implementing responsibility for a program. The implementing activity will:

a. Appoint a program manager for each program and provide that person with a written charter (attachment 3) giving the authority and necessary resources to manage assigned programs. The information contained in the program manager charter (PMC) may be included in the ISD. The implementing activity, in conjunction with the requiring activity, will determine when a separate PMC is required. Only one program manager will be appointed for a program.

b. Coordinate ISRD with support activities to identify their involvement with the program.

c. Unless otherwise directed by HQ USAF PMD, approve the ISPP prior to distribution.

d. Install, test, remove, or relocate information systems as a part of program management.

e. Provide hardware and software items and any test equipment and tools needed for installation and support which are not available to the operation and maintenance (O&M) activity.

f. Install modification kits if available at the time of equipment installation.

g. Manage, control, and direct the development of software.

h. Review civil engineering design data, including changes, for impact on the program and make sure the drawings support the information systems scheme.

i. Notify the base civil engineer of those structures that will become real property (AFR 85-1, Resources and Work Force Management, and AFM 93-1, Air Force Real Property Accountable Records).

j. Appoint a responsible property officer to manage and control all scheme material from the time it is released from the scheme warehouse until it is transferred (AFM 67-1, USAF Supply Manual).

k. Make sure the program scheme is developed and distributed to all affected activities.

l. Schedule a preinstallation survey and inspect the support construction for technical adequacy and compatibility with the scheme prior to start of the installation.

m. Notify the host command when the need arises to occupy support construction facilities before completion.

n. When equipment is contractor-installed, make sure the contract administration office includes instructions in the contract for the transfer of accountability of Government-furnished and contractor-furnished equipment.

o. Make sure equipment and software accountability is properly transferred to an O&M activity.

p. Establish and chair a test planning working group (TPWG), develop a test and evaluation master plan (TEMP) and assume other responsibilities as provided in AFR 80-14.

q. Notify the program element monitor (PEM) of resource requirements to ensure successful program implementation.

r. Participate in program reviews as directed by the program manager.

1-7. Program Manager Responsibilities. The program manager will manage and implement the program with the aid, advice, and coordination of requiring, implementing, and supporting activities. The program manager is responsible for applying proper policies and practices in implementing the program. In carrying out this responsibility, the program manager must:

a. Conduct an analysis to precisely define, document, and baseline the functional requirements.

b. Ask for more operational detail from the requiring, implementing, and supporting activities if needed for program management.

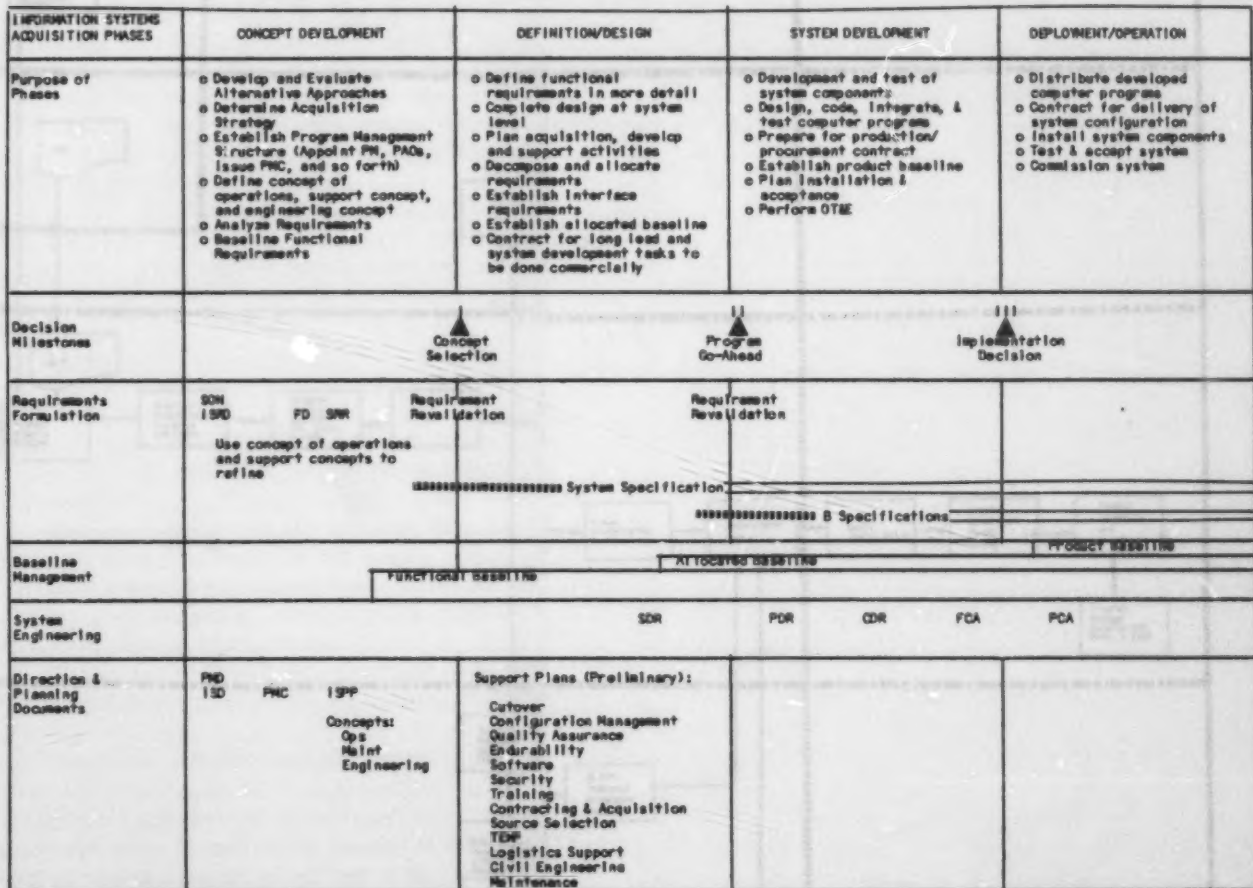


Figure 1-1. Relationships.

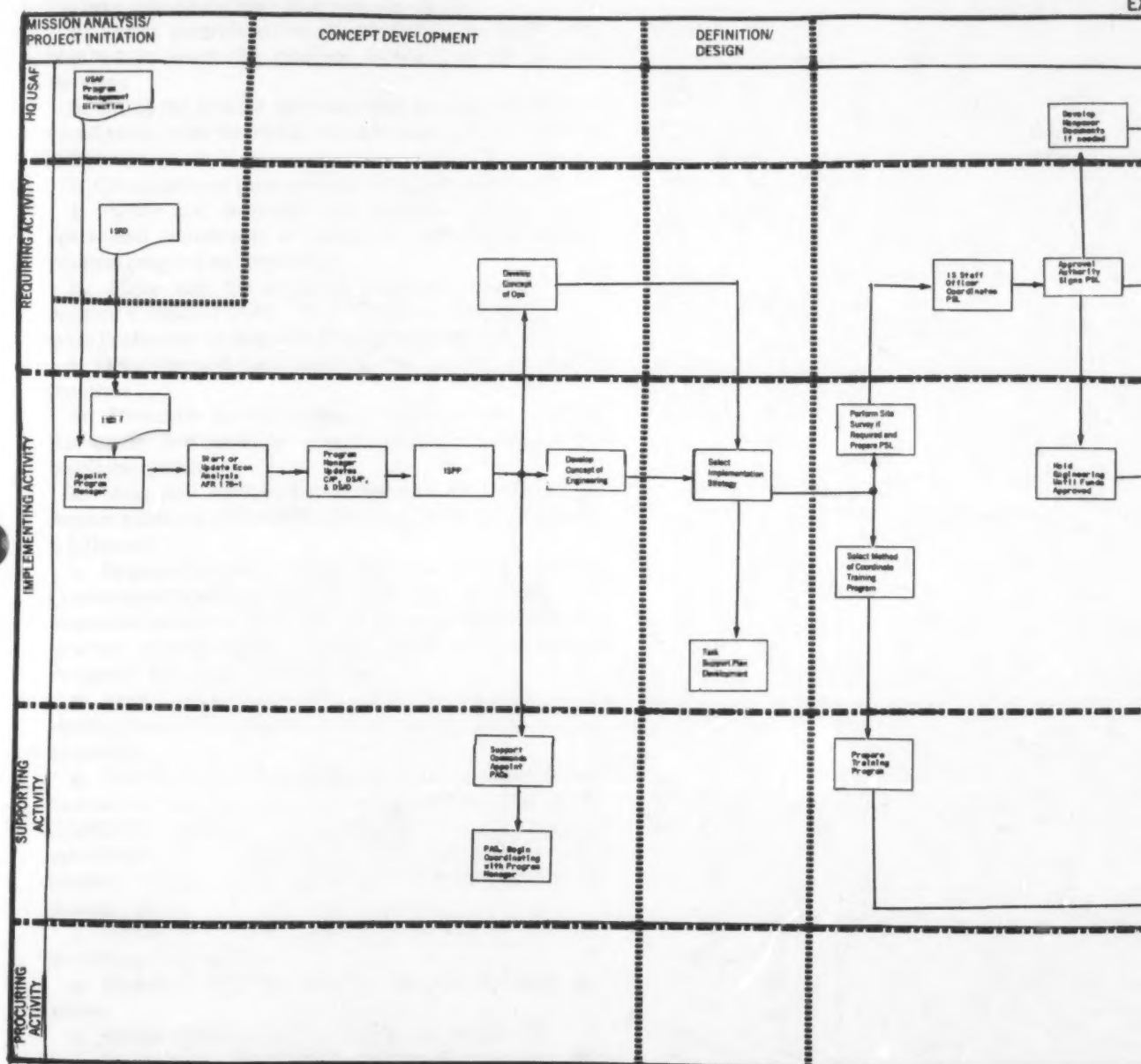
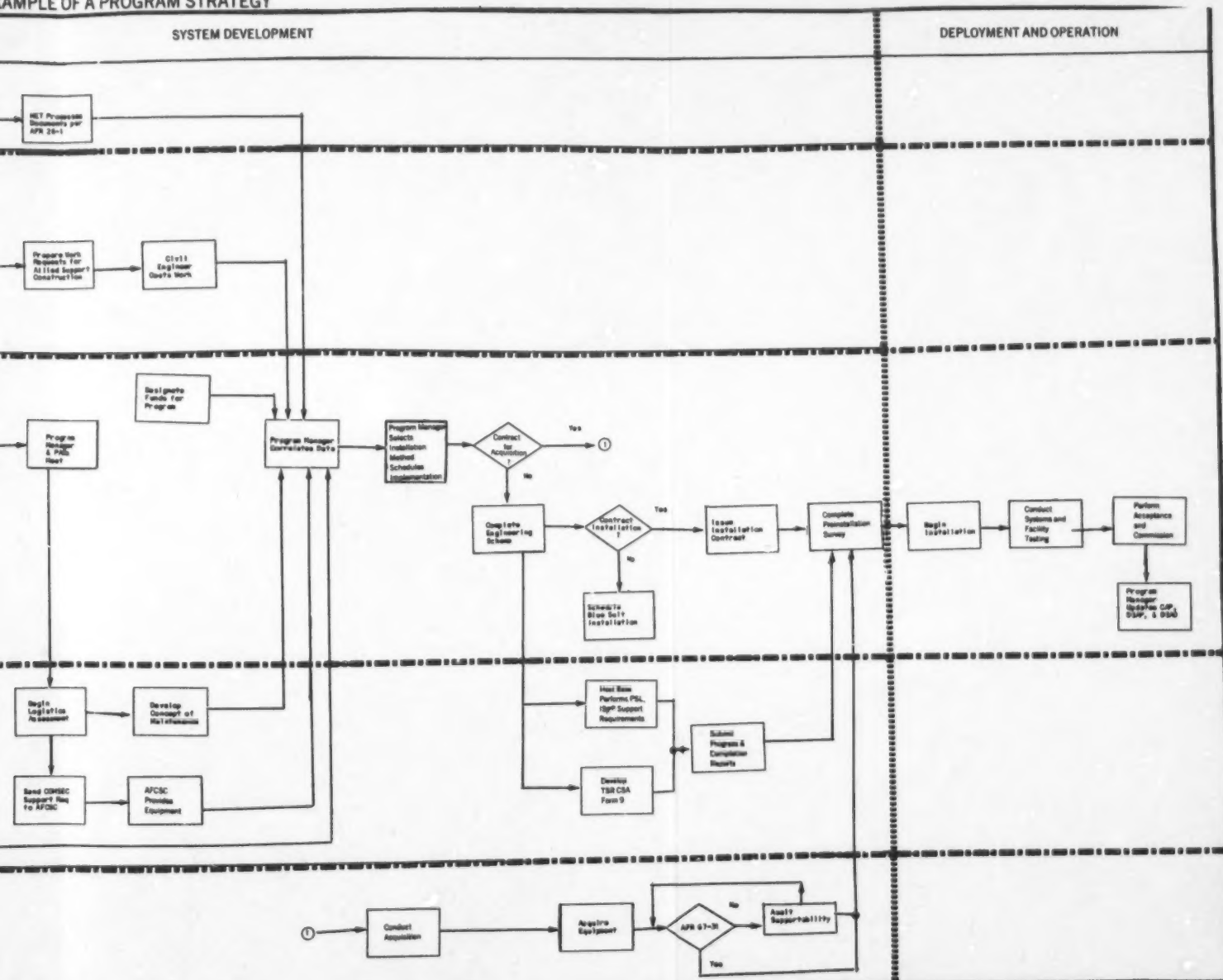


Figure 1-2. Example of a Program Strategy.

EXAMPLE OF A PROGRAM STRATEGY





- c. Prepare, coordinate, and distribute the ISPP.
- d. Make sure appropriate support plans (chapter 3) are developed and incorporated into the ISPP.
- e. Schedule meetings and program reviews, as appropriate, to track program status and resolve issues.
- f. Make sure the sensitivity, criticality, and security classification of the information to be processed by the system has been determined prior to developing the ISPP.
- g. Ensure program action officers (PAO) are appointed as required to assist the program manager as the program develops.
- h. Set up the detailed milestones and program schedules, in coordination with the PAOs, to meet implementing directive milestones.
- i. Coordinate and issue revisions or changes to the ISPP.
- j. Assess and document how proposed changes to the operational requirement or means of implementation affect program progress and objectives.
- k. Make sure the economic analysis is performed or updated if required (AFR 178-1, Economic Analysis and Program Evaluation for Resource Management; and AFR 700-3).
- l. Determine and track program costs and resolve funding problems.
- m. Determine whether organic, contractor, or a combination of the two resources will be required to engineer and install the system.
- n. Make sure appropriate activities start actions to provide support called for in the ISPP and that the established schedule is followed.
- o. Request frequency support guidance from the Military Communications-Electronics Board before proceeding with contractual actions to get or develop equipment that radiates or receives electromagnetic energy (AFR 700-14, Radio Frequency Spectrum Management).
- p. Assign responsibilities for getting host nation approval, electrical safety certification, and connection approval as early as possible.
- q. Coordinate with the acquisition agency to make sure the method for acquiring items, such as communications security (COMSEC) equipment, is programmed to meet a required operational date. Consideration should be given to use of business strategy panels (BSP) per AFR 70-14, Business Strategy Panels.
- r. Manage resources used to support the program and strive to minimize total costs.
- s. Coordinate with the program managers of related programs.
- t. Initiate corrective actions through the appropriate PAOs as problems arise. When problems cannot be resolved at that level the program manager will provide a summary of the problem, with recommendations, to the next level of command.
- u. Comply with procedures in AFR 100-17, Communications-Electronics Authorization Program (CAP), and AFR 700-7, Information Processing Center Operations Management, for entering and maintaining the program in the appropriate inventory.

v. Determine, schedule, and coordinate required site surveys.

w. Make sure a program support letter (PSL) is prepared and processed when host base support is required.

x. Make sure requests for service (RFS) are prepared as required (DCAC 310-130-1 Defense Communications Agency Submission of Telecommunications Service Requests).

y. Make sure agency procurement requests (APR) are prepared in conjunction with the contracting office (Vol II, Information Systems Acquisition and Major Automated Information System Review Requirements).

z. Provide information to the appropriate commands as required (AFR 700-3, attachment 4).

aa. Make sure that all logistics support needs are defined.

ab. Make sure qualified personnel are on hand at the proper time to operate and maintain the facility. If required by AFR 50-8, Policy and Guidance for Instructional System Development (ISD), form a training planning team. Include the resulting training program development management plan in the training support plan of the ISPP.

ac. As the program progresses, periodically advise the implementing command of the total resources expended to implement the program and compare fund use against the baseline to ensure minimal impact to PPBS.

ad. Notify the requiring command information systems staff officer if the cost of a requirement exceeds the original cost estimate by 15 percent due to a change in requirement or to increased cost of implementation.

ae. Comply with the requirements in AFR 19-2, Environmental Impact Analysis Process (EIAP).

af. Notify the implementing activity of resources required to ensure successful program implementation.

ag. Coordinate equipment delivery dates with civil engineering to ensure support facilities and utilities (including power, fire protection, air conditioning, and so forth) are available and can accommodate the equipment.

1-8. Requiring Activity Responsibilities. The requiring activity will:

- a. Develop and coordinate the ISR.
- b. Develop draft PMD when appropriate.
- c. Appoint PAOs, at a level consistent with the scope and importance of the program, to serve as focal points throughout program management.
- d. Notify the program manager of PAO appointments.
- e. Carry out responsibilities defined in the ISD, ISPP, and other documents relating to the program.
- f. Work with the program manager to give needed information, definition, and advice about the requirement.
- g. Validate changes to the original requirements document per AFR 700-3. This gives the implementing command authority to respond.
- h. Provide support to implement the program as required in the implementing directive.
- i. Replace missing components and damaged, command-furnished equipment.

j. Arrange for disposal of removed equipment through the base contracting office, supply, or civil engineer channels before the removal is completed.

k. Prepare documents, such as the functional description, as required by the program manager.

l. Participate in program reviews as directed by the program manager.

m. Participate in testing and certification of the system.

1-9. Air Force Logistics Command (AFLC) Responsibilities. AFLC will:

a. Upon receipt of the implementing directive, appoint PAOs at a level consistent with the scope and importance of the program to serve as focal points throughout program management.

b. Notify the program manager of PAO appointments.

c. Carry out responsibilities defined in the ISD, ISPP, and other documents relating to the program.

d. Provide the program manager with needed information, definition, and advice about the requirement.

e. Acquire and provide major and minor equipment items for the installation as specified in the ISD.

f. Ship equipment in time compliance technical order (TCTO) complete condition.

g. Make sure initial and follow-on logistics support is available to O&M activities per the ISD.

h. Keep the program manager and supporting command PAOs advised of equipment delivery dates.

i. Support the OT&E effort by complying with the responsibilities identified in AFR 80-14.

1-10. Electronic Security Command (ESC) Responsibilities. ESC Air Force Cryptologic Support Center (AFCSC) will:

a. Provide the required COMSEC material allocated in the COMSEC equipment program.

b. Upon receipt of the implementing directive, appoint PAOs, at a level consistent with the scope and importance of the program, to serve as focal points throughout program management.

c. Notify the program manager of PAO appointments.

d. Carry out responsibilities defined in the ISD, ISPP, and other documents relating to the program.

e. Provide the program manager with needed information, definition, and advice about the requirement.

1-11. Host Command Responsibilities. The command owning the host base will provide:

a. PAOs, at a level consistent with the scope and priority of the program, to serve as focal points throughout program management.

b. Notification to the program manager of PAO appointments.

c. Support as defined in the ISD and other documents relating to the program.

d. The program manager with needed information, definition, and advice about the requirement.

e. Support construction, maintenance, and repair work as stated in the ISPP, support plans, and the PSL.

f. A secure storage area and Government vehicle parking area to prevent pilferage of installation tools and equipment.

g. A supply account number for installation personnel to use for replacement items as well as to generate stock levels for necessary operating supplies.

h. Preliminary and final civil engineering design data and reproducible copies of as-built drawings of construction to the implementing command.

i. Secure storage of scheme material per AFM 67-1 and AFR 69-8, US Air Force Storage.

j. Vehicles and petroleum, oil, and lubricants (POL) for efficient movement of Department of Defense (DOD) program installation personnel and supplies. When host base resources are not available to provide vehicle support, the host base will budget for and arrange General Services Administration (GSA) or commercial rental vehicles.

k. Assistance to the installation team in obligating implementing command local purchase and contractual funds sent to the base.

l. Services needed to coordinate with other activities during the installation.

m. Base administrative, engineering, maintenance, photography, and similar Government assistance.

n. Utilities at the installation site.

o. Packing, crating, local transportation, and shipment of program material.

p. Serviceable cable ducts.

q. Disposition of excess and residual scheme material (AFM 67-1).

r. Temporary custody of partially installed facilities and equipment.

s. Base-level management of initial spare support list (ISSL), assets, and documentation per AFM 67-1.

t. Program review participation as directed by the program manager.

u. Support to the OT&E effort by complying with the responsibilities identified in AFR 80-14.

1-12. Other Activities Responsibilities. Other activities involved with the program will:

a. Upon receipt of the implementing directive, appoint PAOs, at a level consistent with the scope and priority of the program, to serve as focal points throughout program management and notify the program manager of the appointments.

b. Carry out responsibilities defined in the ISD, ISPP, and other documents relating to the program.

c. Work with the program manager to give needed information, definition, and advice about the requirement.

d. Participate in program reviews as directed by the program manager.

1-13. Program Action Officer (PAO) Responsibilities. PAOs will:

a. Monitor and coordinate all program management actions assigned to their activity.

b. Give status information to the program manager per the implementing directive.

c. Report changes that could affect program development to the program manager.

d. Participate in program management meetings at the request of the program manager.

e. Develop support plans as required in the ISPP.

1-14. Contracting Officer Technical Representative. The contracting officer is not solely responsible for the technical aspects of the information resource acquisitions needed to implement the program. The program manager will designate a contracting officer technical representative for each acquisition to assist the contracting officer in the more technical tasks. The contracting officer technical representative assists the contracting officer in such tasks as:

a. Evaluating alternative acquisition methods with a comparative system or item life cycle cost analysis and selecting the acquisition method that represents the LTOC.

b. Developing the source selection plan for the planned acquisitions, including performance validation strategies as necessary; for example, automatic data processing equipment (ADPE) benchmarking, remote terminal emulation, and operational capability demonstrations.

c. Developing, reviewing, and coordinating for approval of the contracting and acquisition support plan (paragraph 3-9).

d. Developing, reviewing, and coordinating for approval of the technical requirements and functional specifications

(mandatory and desirable), special provisions, and contractor support portions of the solicitation documents required for the acquisitions.

e. Soliciting, reviewing, and coordinating industry comments on draft solicitation documents.

f. Preparing, reviewing, and coordinating approval of notices in the Commerce Business Daily for distribution of the draft solicitation document for industry comment, announcement of availability of the final solicitation document, intent to make an award, and final contract award.

g. Planning and conducting proposal conferences with industry representatives.

h. Referring verbal or written industry questions on the solicitation to the contracting officer.

i. Preparing responses to technical questions from industry on the solicitation documents (for transmittal by the contracting officer to all other prospective bidders or as input to an amendment to the solicitation document).

j. Forming and participating in proposal evaluation teams.

k. Participating in negotiations for best and final offers.

l. Planning and conducting debriefing for unsuccessful offers.

m. Conducting post-award contract administration (monitor acceptance testing, review contractor deliverables, analyze automatic data processing and software performance, coordinate installation activities, certify periodic payments under the contract through the contracting officer and finance official, and so forth).

Chapter 2

DEVELOPING AND MAINTAINING THE INFORMATION SYSTEMS PROGRAM PLAN (ISPP)

Section A—Introduction

2-1. The Information Systems Program Plan (ISPP). This chapter explains how to prepare, develop, and maintain the ISPP. The ISPP outlines the actions necessary to fulfill a validated or approved requirement. This process is one of continuing evaluation that starts when the implementing command appoints a program manager and ends when the program is commissioned. As the process begins, there are fundamental ideas about how the stated need should be fulfilled. However, the various functions in program management are interrelated. As detail is added to one function, other functions may be affected. Because of the close interrelationships and evolving nature of program management functions, the program manager must revise or update the ISPP as necessary.

2-2. Cost Estimating Threshold. During program development, if the program cost increases by 15 percent over the formal estimate or if additional manpower is needed the program manager must notify the requiring and implementing activities information systems staff officers and recommend action. Guidelines contained in Federal Government Accounting Pamphlet No 4, Guidelines for Accounting for Automatic Data Processing Costs, will be followed in accounting for actual costs.

Section B—Factors to Consider Prior to Preparing the Information Systems Program Plan (ISPP)

2-3. Introduction. There are several factors a program manager must consider early in the program management process. While these factors must be monitored throughout program management, the program manager may not issue the ISPP until the factors discussed in this section are addressed.

2-4. Determining Lowest Total Overall Cost (LTOC). The program manager must ensure that an information system is developed, acquired, evaluated, logistically supported, and commissioned to meet the stated need at the LTOC. To determine the LTOC, the program manager must consider and document the areas listed below. The proposed technical solution in the requirements document provides an estimate to assist the program manager in determining the LTOC. The program manager documents the LTOC decision on the Certificate of Satisfactory Economic Analysis (AFR 178-1) or in a format appropriate for the scale of the program. The LTOC will become evident when bids are evaluated. The LTOC decision will be maintained as part of the life cycle documentation.

a. Use or Reporting of Excess ADPE:

(1) ADPE will not be acquired from commercial sources until it is determined that the requirement cannot be met

through the ADPE reutilization program (DOD Directive 7950.1, Automated Data Processing Resources Management (C)) at a greater savings to the Government. The program manager must use the automated ADPE reutilization management system to screen all ADPE requirements. The program manager and requiring activity will determine the suitability of available excess equipment offered through ARMS screening. The program manager will make sure that procurement files are documented to support the refusal of ARMS equipment offered.

(2) All ADPE, as defined in DOD Directive 7950.1, Appendix D scheduled to be replaced by new acquisitions or no longer required for the purpose for which it was originally acquired will be reported to the Automatic Data Processing Equipment Reutilization Office for processing as prescribed in DOD Directive 7950.1 but only after local and MAJCOM reassignment. SF 120, Report of Excess Personal Property, is the official form for reporting excess ADPE. The program manager will prepare the SF 120 per instructions in DOD Directive 7950.1 and forward it to the 1st Information Systems Group/GLIA, Wash DC 20330-6340, at least 180 days before the equipment release date. The 1st Information Systems Group is the Air Force focal point for the operation of the Air Force ADPE Reutilization Program.

b. Use and Reporting of Existing Software:

(1) The Federal Software Exchange Program (FSEP) was established by the Federal Property Management Regulation, Amendment E-180 to reduce the costs of software development in the Federal Government.

(2) The Federal Software Exchange Center is part of the National Technical Information Services of the Department of Commerce. The center collects and catalogs summaries of Federal agency software. These summaries are published in the Federal Software Exchange Catalog which is available on a subscription basis from the:

Federal Software Exchange Center
5285 Port Royal Road
Springfield VA 22161-0000

(3) AFP 300-1, Data Systems Authorization Directory (DSAD), establishes the DSAD to support the objectives of and provide input to the FSEP. The DSAD provides a catalog of descriptions with associated costs of automated data systems operating on ADPE in the Air Force. The program manager will search the DSAD for an appropriate system that could be used to satisfy the software requirements of the program. The program manager will make sure that software developed to satisfy requirements is reported for inclusion in the DSAD per instructions in AFR 700-9, Volume II, Information Systems Data Element Standardization and Management.

c. Consideration of Computer Timesharing. Computer timesharing services, when obtained from either commercial

sources or by intra-Government sharing of data processing equipment, can often result in a lower life cycle cost than acquisition and in-house operation of a data processing system. The primary contact for timesharing services in the Air Force is the San Antonio Data Services Center.

d. Determination of Other Sources Available Through Contact with the Appropriate Contracting Office. The program manager must obtain information from the contracting office about purchase options (such as competitive bids, sole source, and lease options), whether there are existing contracts (such as GSA schedules), and how much these options may cost.

2-5. Identifying Program Funding Profile. The program manager must determine the specific resources needed to implement the program and determine the total funds needed to acquire the resources. In coordination with the supporting commands, the program manager determines the funding profile which is necessary to allow equipment and software to be on hand when required.

2-6. Program Status Reporting. The program manager needs current information from the support activities to make sure the program is on schedule and to assess the impact of changes in support availability. PAOs will provide an initial status report and followup reports as directed by the program manager. The program manager will use RCS:HAF-SIT (AR) 8202, Communications-Electronics Program Implementation Status Reports, when directing PAOs to submit reports. The program manager will provide reporting directions in the ISPP. The RCS has an emergency status and precedence category of C-3 and a MINIMIZE indicator of N.

2-7. Operations, Maintenance, and Engineering Concepts. Except for simple programs or for programs which are similar to other previously completed program efforts, the program manager is responsible for making sure concepts of operations, maintenance, and engineering are developed to clarify and amplify the requirement stated in the ISRD or statement of need (SON) which generated the program. This section will be used by PAOs to alert the program manager to problems or potential problem areas. PAOs should relate the problems to impact on the milestones in the ISPP. The program manager may specify the information for this section on a case-by-case basis.

Section C—Preparing the Information Systems Program Plan (ISPP)

2-8. General Information:

a. After addressing and documenting the factors discussed in section B, the program manager prepares the ISPP. The ISPP identifies all tasks needed for program development and assigns specific responsibilities for carrying out each task. Complex programs may need an ISPP addressing many areas while small programs may need only a few paragraphs. As additional tasks are identified and program details are refined,

the program manager must revise the ISPP. The initial issue will specify how changes and revisions to the ISPP will be processed. The program manager lists the concepts or plans needed to carry out the program in the initial ISPP and the agency responsible for producing each. As the program develops, if more support plans are needed, the program manager will identify and assign responsibility for the plans in revisions to the ISPP.

b. All ISPPs must have, as a minimum, the data listed in paragraph 2-9. Chapter 3 describes support plans which may be needed to detail program requirements. These support plans may range from abbreviated statements to fully developed detailed plans. The program manager must identify in the ISPP which support plans will be needed.

2-9. Format and Content of the Information Systems Program Plan (ISPP). Following is the ISPP format. The level of detail must be tailored to the scope and complexity of the program being managed.

a. Title Page or Cover Page. The title page of the ISPP will include the following:

- (1) Security classification.
- (2) Program title.
- (3) Program authority (ISD or PMD title and control number).
- (4) Program manager's name, organization, and telephone number.
- (5) Signature block of ISPP approval authority (as specified in the ISD).
- (6) Date.

b. Distribution List.

c. Program Summary. The program summary contains a brief discussion of the following:

- (1) Purpose.
- (2) Objectives.
- (3) Description.
- (4) Assumptions.
- (5) Constraints and limitations.

d. Program Management Organization and Personnel. This section briefly describes the program management structure to include an organization chart, a list of key personnel, and a list of functional area points of contact.

e. Review and Update of the ISPP. This section will briefly explain how and when changes to the ISPP will occur; for example, as needed, monthly, quarterly.

f. Program Participants and Tasking. This section identifies and briefly describes the Government and contractor organizations involved. This section describes responsibilities, the flow of work from one organization to another, and the formal agreements setting up organization interfaces. Tasking includes responsibilities for development of the concepts of operations, engineering, and maintenance and any support plans. Participants in information systems programs normally include the following activities:

- (1) Requiring.
- (2) Implementing.
- (3) Logistics.

(4) Selection and acquisition.

(5) Manpower.

(6) Training.

(7) OT&E.

(8) O&M.

(9) Security.

g. Major Milestones. This section contains the milestone schedules essential for timely accomplishment of the program. As a minimum, this section will include the following:

- (1) Milestone schedules of major events.
- (2) Production and delivery schedules.
- (3) Training schedules.
- (4) Support facilities and system activation schedules.
- (5) Test acceptance and commissioning schedules.
- (6) Logistics support schedules.

(7) OT&E schedules.

(8) Software development schedules.

(9) Programmed funding profile.

(10) Host base support schedules.

h. Reporting. This section describes reports to be submitted, including a cross-reference to the directive generating the report, and whether contractor inputs will be required. As a minimum, this section will address progress reports, configuration management reports, problem reports, and cost analysis reports. Reports control symbols, interagency reports control numbers, and Office of Management and Budget (OMB) clearance numbers should be shown for each data collection required from Air Force activities or contractors.

Use or Reporting of Excess (1) ADP will not be acquired (2) ADP will not be acquired (3) ADP will not be acquired

Chapter 3

INFORMATION SYSTEMS PROGRAM PLAN SUPPORT PLANS

Section A—Support Plan Organization

3-1. Introduction. A program may be too complex to be totally defined within the limited scope of the ISPP. In these cases the program manager will use support plans to provide additional detail and guidance to program participants. Support plans are not part of the concepts of operations, maintenance, or engineering, but there is a relationship between the support plans and these concepts. For this reason, support plans are grouped under the concepts with the greatest impact on the particular support plan. For example, it would be logical to have a concept of operations before developing the support plans for security, survivability, mobility, or training. This grouping is not meant to indicate a required sequence for developing these plans. The program manager should organize the support plans to best suit the particular program. Figure 3-1 shows a suggested format for support plans. Support plans will be annexed to the ISPP. The program manager determines which support plans will be developed. If the program manager chooses not to identify any support plans, some areas in this chapter under various support plan headings may still need to be addressed in the basic ISPP. The program manager will ensure all applicable areas are covered. Support plans include but are not limited to the following:

- a. Endurability.
- b. Security.
- c. Training.
- d. Contracting and acquisition.
- e. Source selection.
- f. Configuration management.
- g. Software development.
- h. Engineering and installation.
- i. Civil engineering.
- j. Hardware and software turnover.
- k. Quality assurance.
- l. TEMP.
- m. Logistics.
- n. Maintenance.
- o. Manpower.

Section B—Concept of Operations

3-2. Preparation and Contents. The concept of operations is prepared by the user and provides detail about intended operational procedures, capabilities, and needs above those listed in the ISRD or HQ USAF implementing directive. AFR 55-24, System Operational Concepts, provides specific guidance on when a formal concept of operations will be developed and the required format. The concept of operations would cover the following areas:

- a. Unit mission and activity (wartime and peacetime).
- b. Endurability requirements.

SUGGESTED FORMAT FOR SUPPORT PLANS

Classification
Title of ISPP
Title of Support Plan
Office of Primary Responsibility
Coordination Page
Table of Contents
Terms and Abbreviations
Distribution List
Paragraph 1 – Introduction
– Support objectives
– Scope and applicability
– Assumptions
– Constraints and limitations
– Background
– References and applicable directives
– Contracting office
– Effective date
Paragraph 2 – Policy
Paragraph 3 – Responsibilities
Paragraph 4 – Schedule

Figure 3-1. Suggested Format for Support Plans.

c. Security requirements to include mode of operation, classification, hardware and software security mechanisms, sensitivity, criticality, physical and personnel security, COMSEC, compromising emanations (TEMPEST), and Privacy Act.

- d. Training requirements.
- e. Standardization and interoperability requirements.
- f. Employment and deployment concepts.
- g. Operational environment.
- h. Supporting applications software and equipment.
- i. Operational reliability under routine, priority, and degraded conditions.
- j. Functional responsibilities.
- k. Hardware, software, and communications interfaces.

3-3. Support Plans Related to the Concept of Operations.

In addition to the concept of operations, additional support plans may be needed to provide further detail and guidance. This section briefly explains some of the support plans which may be needed.

3-4. Endurability Support Plan. Endurability consists of the ability to survive, reconstitute, and sustain operations. This support plan will describe the approach to solving the endurability needs defined by the concept of operations. The solutions to endurability will cover the need to provide continuing reliable support during unfavorable conditions for a

stated period of time. Solutions to survivability requirements should address the ability to continue operating the information system during nuclear or conventional conflict, hostile countermeasures, or natural disaster. Solutions to sustainability requirements will address the ability of the information system to reconstitute its operation after a critical failure.

3-5. Security Support Plan. This support plan describes the approach to comply with identified security requirements. Use AFR 700-10, Information Systems Security, and AFR 205-16, Automatic Data Processing (ADP) Security Policy, Procedures, and Responsibilities, for security guidance.

3-6. Training Support Plan. The training support plan will describe the needed training. It will be prepared using AFR 50-8 and AFR 50-9, Special Training, as a guide.

Section C—Concept of Engineering

3-7. Preparation and Contents. This section describes the overall approach to system engineering management. It provides a description of the equipment and software necessary to meet the user's stated need. The concept of engineering is prepared as tasked by the ISD. Where applicable, it includes, but is not limited to, the following:

- a. Engineering definition of the complete system.
- b. Reliability, maintainability, nondestructive inspection, corrosion prevention, human engineering, survivability, transportability, value engineering, quality assurance, technical performance measurement, and the defense standardization program.
- c. Electromagnetic compatibility and TEMPEST, including analysis measurement, standards, frequency allocations, and operational constraints.
- d. Computer, computer programs, and associated documentation (DOD Directive 7935.1, DOD Automated Data Systems Documentation Standards). Considerations such as capacity, interface, and environmental needs should be included.
- e. Safety.
- f. Environmental impact.
- g. Known and potential biomedical problems.
- h. Tactical shelters.
- i. Hardness criteria.
- j. Risk management, including the steps required to:
 - (1) Identify all risk areas and the associated risk factors.
 - (2) Assess the probability of occurrence and the potential impact on cost, schedule, performance, and supportability.
 - (3) Identify and analyze the alternatives available for reducing the risk.
 - (4) Select and implement the best alternative.
 - (5) Provide feedback.

3-8. Support Plans Related to the Concept of Engineering. After the program manager receives the concept of engineering some additional support plans may be needed to provide

further detail and guidance. This section briefly explains some of the support plans which may be needed.

3-9. Contracting and Acquisition Support Plan. Contracting is covered in detail in volume II of this regulation. Prior to and during acquisition, the program manager will work with the contracting office to make sure all required contracting actions are addressed. To make sure the contract milestones are met, the contracting activity should be included in the development of the support plan as early as possible.

a. **Acquisition.** When the acquisition strategy is determined, the program manager and the contracting officer determine the type of contract and method of acquisition.

b. **Documentation.** The program manager is responsible for providing an adequate purchase request package to include all supporting documentation (specifications, data requirements, sole source justification, urgency justification, and so forth) to the contracting activity (AFR 70-15, Source Selection Policy and Procedures).

c. **Synopsis Requirements.** For allocations \$10,000 and over, a notice in the Commerce Business Daily must be published to announce the following events or milestones in the acquisition:

- (1) Intent to solicit bids or proposals for the information resources or technical services.
- (2) Intent to place an order under a GSA nonmandatory schedule contract.
- (3) Announcement of the availability of draft solicitation documents for industry review (optional).
- (4) Announcement of the availability of final solicitation documents and submission date for bids or proposals in response to the solicitation.
- (5) Announcement of the award of all contracts \$100,000 and over.

d. **Commerce Business Daily Notices.** Each Commerce Business Daily notice must contain an accurate description of the information resources or technical services to be contracted. The description must not be worded to restrict competition, but must contain description items that can be fairly costed by potential vendors. Since the contracting and acquisition plan must allow for publication periods for these notices, the contracting officer should be contacted to determine the current DOD and Air Force rules for Commerce Business Daily notices.

3-10. Source Selection Support Plan. The acquisition process typically begins with the submission of a justification for major system new start. This document leads to actions that are directed with one or more implementing directives. The source selection process is initiated after the release of an implementing directive. The source selection support plan is a key document for initiating and conducting the source selection. The source selection support plan will reflect implementing directive guidance and will be in the format specified by AFR 70-15. The program manager will prepare and forward the plan to the source selection authority for approval.

3-11. Configuration Management Support Plan. Configuration management identifies, controls, accounts for, and audits the functional and physical characteristics of systems, equipment, and other designated material items developed, produced, operated, and supported by DOD components. Configuration management applies to all elements of a system—equipment, software, support equipment, facilities, documentation (specifications, plans, drawings, manuals, and any other documentation that applies), and other designated material items. This support plan should guide Air Force activities in applying the configuration management practices and procedures of AFR 65-3 and will be developed as directed in the ISPP.

a. Software configuration management will require the use of several change control forms in addition to the requirements of AFR 65-3. The forms, described in paragraphs b(1) through b(5) which follow, are prime sources of information on the status of software and engineering changes during the configuration control process.

b. The program manager will determine if the following forms are appropriate for the program being managed. These forms will only be used for changes that result in the program operating as stated in the original requirements document. The forms will not be used for changes that result in a new capability (AFR 700-3).

(1) AF Form 1773, Baseline Change Request (BCR). Use AF Form 1773 to propose a Class I or Class II change (AFR 65-3). It describes the proposed change and its impact on the cost, schedule, and performance of the configuration item (attachment 4).

(2) AF Form 1774, Design Problem Report (DPR). Use AF Form 1774 to document a problem that is identified prior to or during a formal review or audit (attachment 5).

(3) AF Form 1775, Software Problem Report (SPR). After development testing begins, use AF Form 1775 to describe a suspected discrepancy or deficiency in an existing computer program, in its documentation, or interfacing software. It is a record of the discrepancy from the beginning until the problem is solved (attachment 6).

(4) AF Form 1776, Data Base Change Request (DBCR). After the data base is placed under configuration control, use AF Form 1776 to control changes to the data base. When a problem is reported via an SPR and a solution to the problem requires a data base change, a DBCR is prepared and distributed. After the DBCR is approved, the data base is updated accordingly (attachment 7).

(5) AF Form 1146, Engineering Change Request/Authorization. The AF Form 1146 is used to recommend minor changes to engineering documents such as schemes. The activity recommending the change forwards the form to the program manager who will resolve the change with the engineering activity. The program manager advises the activity when a decision is reached on the recommendation. This form will not be used to change operational capability, materiel, military construction program requirements, or to correct drafting errors (attachment 5).

3-12. Software Development Support Plan. For software development or conversion requirements, the quality assurance, configuration management, test and evaluation, and software development and software conversion support plans must be prepared. To minimize problems during software development, it is important to set up baselines. These baselines state exactly what the finished software product should do. The user and the software designers define the baselines for a particular software effort. Once defined, a baseline may not be changed without the consent of the user and the designer. In addition to setting up baselines, software development calls for several reviews. These reviews check how well the software being developed meets the baselines and allows for adjustments if needed. Figure 3-2 indicates how a program manager applies the various reviews to different types of software development efforts. The program manager, however, may apply these reviews differently to suit the situation. Refer to figure 3-3 for an illustration of the relationships and flow of documents between the reviews. Refer to MIL-STD-1521B, Technical Reviews And Audits For Systems, Equipment, And Computer Programs, for a detailed description of each review. DOD Directive 7935.1 provides direction on documentation required for these reviews.

3-13. Engineering and Installation Support Plan. This plan will cover the actions necessary to do the engineering and installation support for a program. For programs in which engineering and installation support is contracted, many of the actions discussed below will be in the statement of work. The program manager will determine the scope of the engineering and installation support required and the need to prepare a plan in coordination with the activities involved in this support. The following items should be addressed:

a. **Equipment Selection.** As applicable, the command information systems staff officer, information systems engineer, appropriate air logistics center, requiring command, and procurement activity recommend to the program manager the proper equipment to provide the required capability.

b. **Method of Implementation.** Early in this process the program manager will determine how to implement the program requirements. The program manager must select a means for providing equipment and services for the required capability from the options available. A few examples of the available options are equipment installed, operated, and maintained by the Government; contractor-leased facilities and services; unit-level self-help; or a combination of these options in a variety of ways to meet specific program needs. If the best options do not coincide with the type of funds (3400 and 3080) programmed in the program objective memorandum (POM), the program manager should contact the affected commands and the HQ USAF PEM regarding the feasibility of adjusting program funds.

c. **Advance Acquisition Actions.** The program manager, with advice from the information systems engineer and acquiring command, will know if advance acquisition of long leadtime items is necessary. If Air Force Logistics Command

REVIEWS AND DOCUMENTATION	DEVELOPMENT MAN-YEARS			
	Less Than 1	Greater or Equal to 1 and Less Than 10	Greater or Equal to 10 and Less Than 25	Greater or Equal to 25
REVIEWS AND DOCUMENTATION		X	X	X
SYSTEM REQUIREMENTS REVIEW		X	X	X
SYSTEM DESIGN REVIEW		X	X	X
PRELIMINARY DESIGN REVIEW			X	X
CRITICAL DESIGN REVIEW		X	X	X
PRODUCT VERIFICATION REVIEW			X	X
SYSTEM VALIDATION REVIEW	X	X	X	X
FUNCTIONAL DESCRIPTION		X	X	X
PHYSICAL CONFIGURATION AUDIT				X
FUNCTIONAL CONFIGURATION AUDIT				X
SYSTEM/SUBSYSTEM SPECIFICATION		X	X	X
PROGRAM SPECIFICATION				X
TEST PLAN			X	X
TEST ANALYSIS REPORT			X	X
USERS MANUAL	X	X	X	X
COMPUTER OPERATION MANUAL	X	X	X	X
PROGRAM MAINTENANCE MANUAL	X	X	X	X

NOTE: These guidelines are minimum; the ISPP may add more. The review requirements apply to modifications as well as new development. For modification, existing documentation will be updated. The data requirements document and the data base specifications will be developed as required by the program manager.

Figure 3-2. Documentation and Review Determination.

SOFTWARE DEVELOPMENT USING DOD ADS DOCUMENTATION STANDARD 7935.1-S AND AFR 700-9

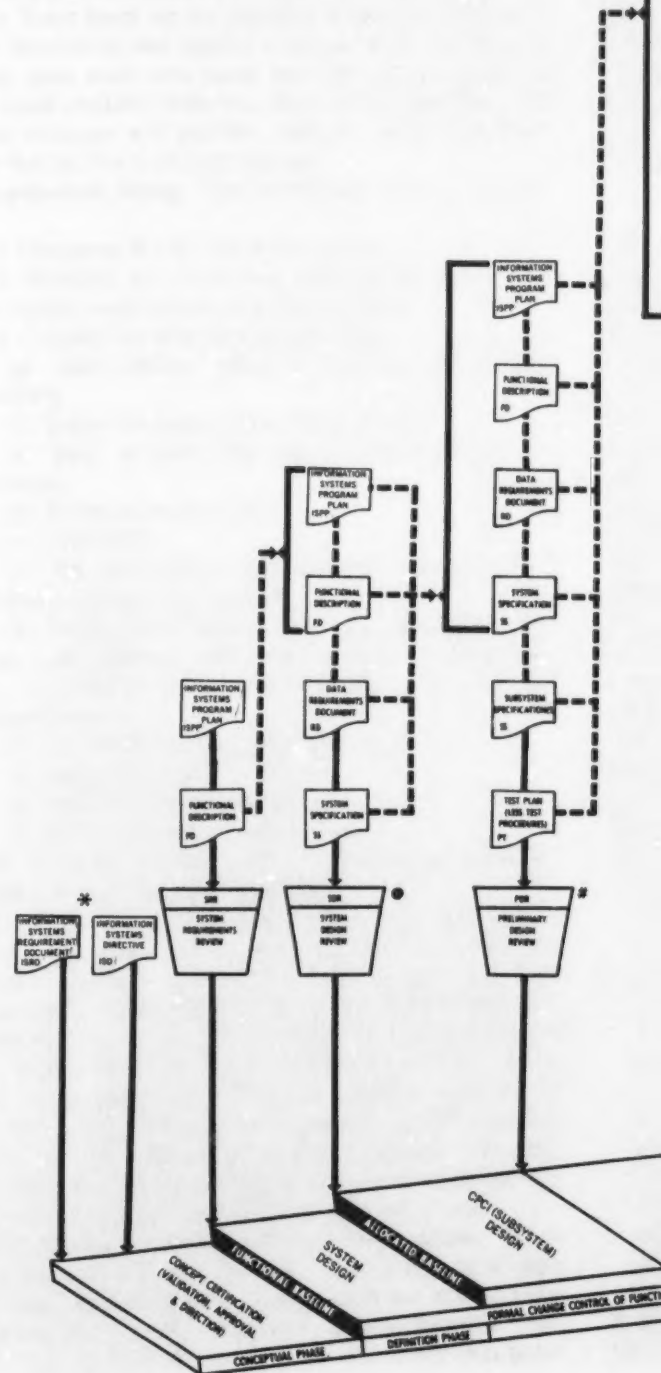
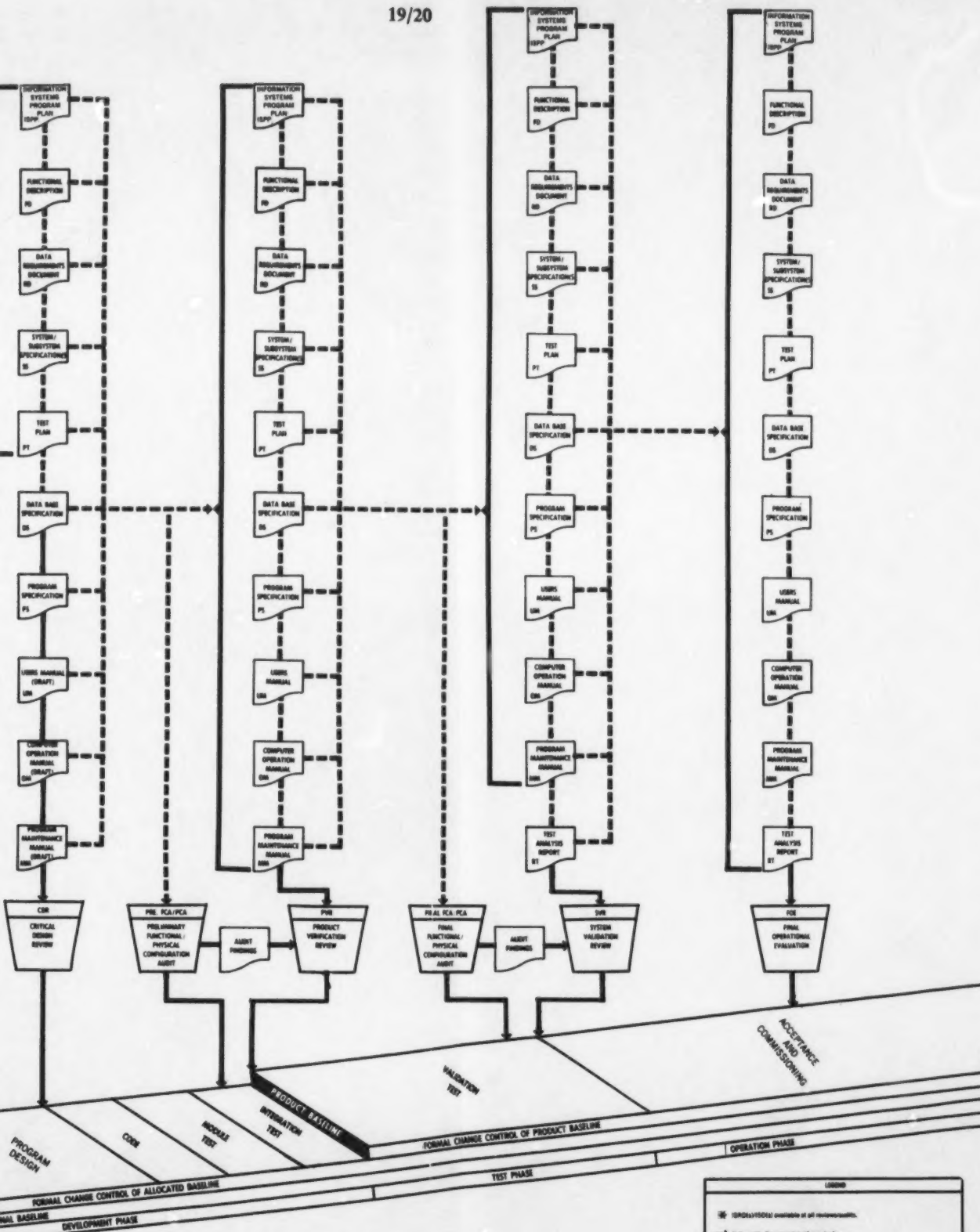


Figure 3-3. Software Development Flowchart.



SOFTWARE DEVELOPMENT

USING DOD AND DOCUMENTATION STANDARDS

IN PREPARATION FOR THE
 OF THE
 OF THE
 OF THE

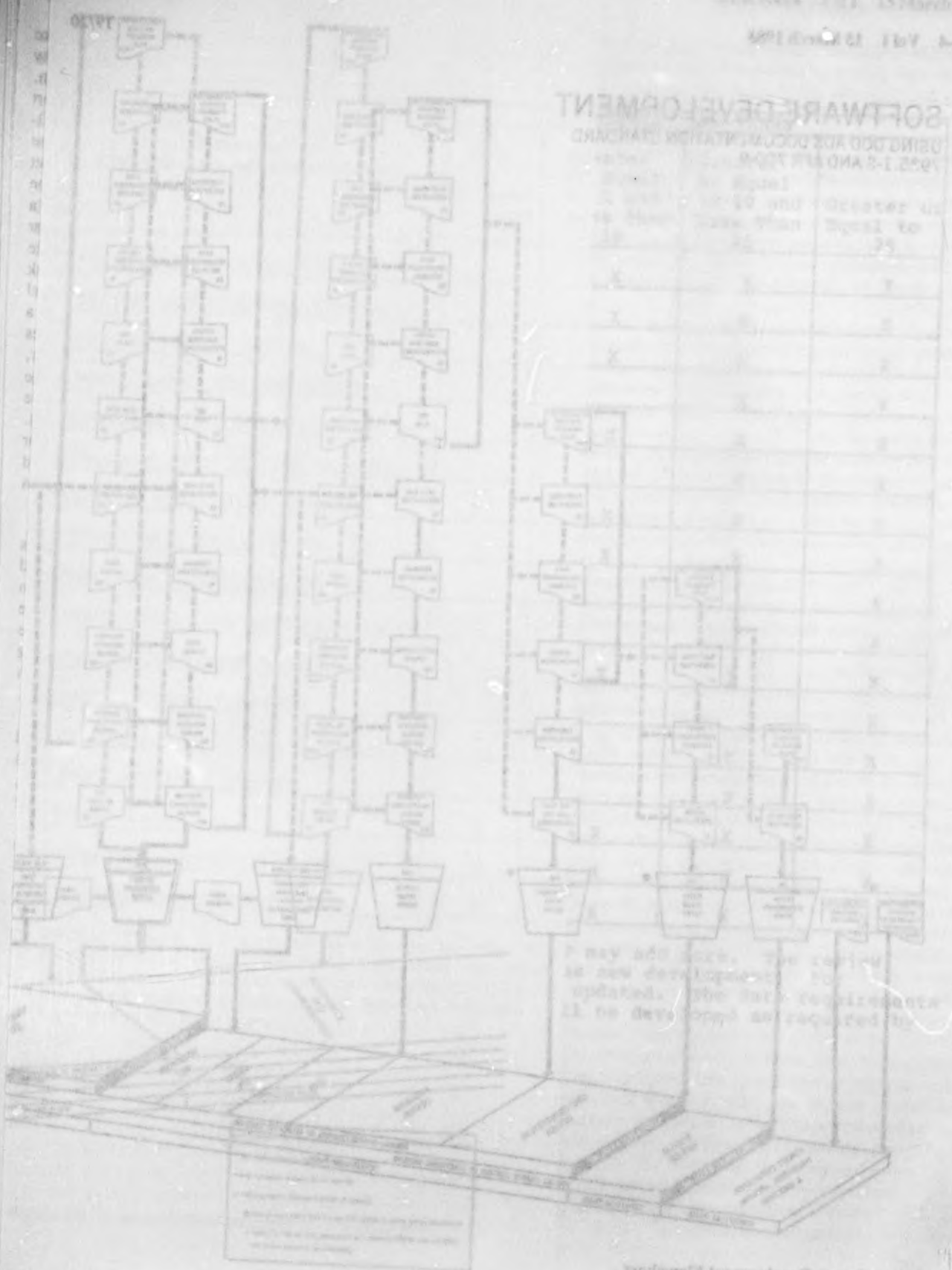


Figure 3-1. Software Development Flowchart

(AFLC) is the acquiring command for Air Force Communications Command (AFCC) and advance acquisition is needed, the following procedures apply:

(1) Advance acquisition actions are handled by advance purchase requests and planning purchase requests. Advance or planning purchase requests are also used when the required operational date (ROD) dictates early procurement. The implementing command will negotiate proposals for advance or planning purchase requests with the acquisition agency.

(2) Since funds are not available at the time of purchase request preparation and release to procurement, the program manager must make sure funds have been programmed and will be made available at the time the contract is awarded. The program manager will provide evidence to the acquisition activity that the funds are programmed.

d. Equipment Siting. The information systems engineer will:

- (1) Determine if a site survey is required.
- (2) Schedule and coordinate required site surveys and support facility requirements with the host base.
- (3) Consider the following siting factors.
 - (a) Survivability, physical security, and systems compatibility.
 - (b) Impact on existing or planned systems.
 - (c) Real property and allied support construction requirements.
 - (d) Preferred products list.
 - (e) TEMPEST.
 - (f) Electromagnetic compatibility, electromagnetic interferences, and radiation hazards.
 - (g) International, national, and local operational, geopolitical, and economic constraints such as environmental impact, asset recovery requirements, and contracting and installation costs.
 - (h) Use of a joint distribution system.
 - (i) Safety requirements.
 - (j) Fire protection requirements.
 - (k) Environmental impact statement.
- (4) Conduct preinstallation inspections to determine completion of civil engineering support.
- (5) Prepare the PSL and forward it to the program manager. The program manager sends the PSL to the base information systems staff officer to coordinate with base agencies and to obtain the signature of the ISRB chairperson. The signature represents agreement that the base will provide needed support within the time specified in the PSL. If the support requirements are beyond the approval level of the ISRB, the ISRB chairperson will endorse the PSL through channels to the approving authority (usually the host MAJCOM). The PSL approving authority will return the PSL to the program manager stating actions planned or taken.

e. Information Systems Scheme Engineering. When acquisition, leadtime, or ROD make it necessary to obligate funds early, the information systems engineer will continue engineering and publish information systems schemes. This will identify all material requirements and detail installation

procedures early in program development. Scheme engineering may be scheduled at a later date but in sufficient time to allow commands acquiring resources to obligate program funds in the target year.

f. Engineering Changes. Activities recommending minor changes to engineering documents (schemes and so forth) must address the recommendation to the information systems engineer for resolution. The information systems engineer will act on the recommendation and advise the requestor and program manager of the action. Except for scheme paragraphs annotated as technically critical, minor changes may be requested and approved by telephone or message. Minor changes affecting technically critical scheme paragraphs must be requested and approved by the configuration control board using AF Form 1146 (attachment 8).

3-14. Civil Engineering Support Plan. Guidance for support construction is contained in AFR 85-1, Resources and Work Force Management; AFR 86-1, Programming Civil Engineer Resources; AFM 86-2, Standard Facility Requirements; and AFR 89-1, Design and Construction Management. Appropriate facility project approvals must be obtained before obligating funds for project work and equipment installation. Support facility requirements for test and evaluation activities will be determined in accordance with AFM 86-2. Support facility requirements will be coordinated through civil engineering functional channels, programmed in accordance with AFR 80-22, Funding to Acquire Research and Development (R&D) Facilities and Install R&D Equipment, AFR 86-1, or AFM 172-1, USAF Budget Manual, Volume I, Policies and Procedures, and included in appropriate budget estimate submission (BES) and POM submittals in time to meet equipment delivery dates. This support plan should identify support construction requirements. The complexity of the program and scope of the support construction requirements determine the composition of the civil engineering support plan. For some programs, the PSL is adequate. This support plan should address the following items where applicable:

- a. Air conditioning and humidity control.
- b. Supply storage.
- c. Floor space.
- d. Location and size of the tape vault.
- e. Unique environmental control.
- f. Power (primary and backup).
- g. Emergency lights.
- h. Inhouse conduit and duct.
- i. Roads and hardstands.
- j. Exterior ducts and manholes.
- k. Cable vaults.
- l. Electromagnetic pulse (EMP) and structural hardening.
- m. Fire protection system.
- n. TEMPEST hardening.

3-15. Hardware and Software Turnover Support Plan. The program manager should develop a detailed plan to

procedure early in program development. Scheme engineering may be scheduled at a later date but in sufficient time to allow considerable engineering resources to optimize program loads in the target year.

4. Engineering Changes. Activities for engineering minor changes to engineering documents (schemes and so forth) must address the recommitment to the information system engineer for resolution. The information system engineer will act on the recommitment and advise the requestor and program manager of the action. Escapes for scheme changes may be considered as technically critical, minor changes may be requested and approved by technical or message. Minor changes affecting technical critical scheme paragraphs must be requested and approved by the configuration control board using AF Form 1146 (Attachment B).

3-14. Civil Engineering Support Plan. Guidance for support construction is contained in AFR 83-1, Resources and Work Force Management; AFR 80-1, Programming Civil Engineer Resources; AFM 80-2, Standard Facility Requirements; and AFR 84-1, Design and Construction Management. Appropriate facility project approvals must be obtained before obligating funds for project work and equipment installation. Support facility requirements for test and evaluation activities will be determined in accordance with AFM 80-2. Support facility requirements will be coordinated through civil engineering functional elements, programmed in accordance with AFR 80-2, Planning to Acquire Resources and Development (R&D) Facilities and Install R&D Equipment, AFR 80-1, or AFM 73-1, USAF Budget Manual, Volume I, Policies and Procedures, and included in appropriate budget estimate submissions (BBS) and P&M submissions in time to meet equipment delivery dates. This support plan should identify support construction requirements. The complexity of the program and scope of the support construction requirements determine the composition of the civil engineering support plan. For some programs the P&M is adequate. This support plan should address the following items as they are applicable:

- AFM construction and facility control.
- Supply storage.
- Flow space.
- Location and size of the test vault.
- Environmental control.
- Power (primary and backup).
- Back-up lighting.
- Access control and door.
- Heads and partitions.
- External ducts and manholes.
- Cable vaults.
- Electromagnetic pulse (EMP) and structural hardening.
- Fire protection system.
- TEMBEST hardening.

3-15. Hardware and Software Turnover Support Plan. The program manager should develop a detailed plan to

(AFRC) is the acquiring command for Air Force Communications Command (AFCC) and advance acquisition is needed. The following procedures apply:

(1) Advance acquisition actions are handled by advance purchase requests and planning purchase requests. Advance purchase requests are also used when the required operational data (ROD) differs from procurement. The engineering command will request programs for advance planning purchase requests with the acquisition agency.

(2) Since funds are not available at the time of purchase request, program and request to procurement, the program manager must make sure funds have been programmed and will be made available at the time the request is awarded. The program manager will provide evidence to the acquisition activity that the funds are programmed.

4. Equipment Status. The information system engineer will:

- Determine a site survey is required.
- Substantive and coordinate request site surveys and support facility requirements with the host base.
- Coordinate the following items:
 - Security, physical security, and systems.
 - Compliance.
 - Impact on existing or planned systems.
 - Test property and other support construction.

(5) Program products list.

- TEMBEST.
- Environmental compatibility elements:
 - Environmental, natural, and local operations, political, and common constraints such as environmental impact, social security requirements, and operating and installation costs.

(3) Use of a distribution system.

(4) Custom production inspection to determine completion of civil engineering support.

(5) Prepare the P&M and forward it to the program manager. The program manager works the P&M in the same manner as the P&M in the same manner. The program manager will obtain the signature of the ISRB chairman. The acquisition agency agrees that the host will provide needed support within the time specified in the P&M. If the program manager is beyond the approval level of the ISRB, the ISRB chairman will endorse the P&M through the ISRB. The ISRB approving authority will retain the P&M to the program manager until action is planned or taken.

4. Information System Scheme Engineering. When acquisition, testing, or R&D make it necessary to obligate funds early, the information system engineer will coordinate and follow information system scheme. The well identify all essential requirements and detail installation

provide a smooth turnover at each site involved in the program. The plan will:

- a. Develop a chronological schedule of key turnover events.
- b. Show interrelationships between events and indicate when noncompletion of a turnover by a given time will adversely impact the program.
- c. Describe general turnover procedures.
- d. Describe areas unique to each site that should be addressed. A detailed site-unique plan may be required.

3-16. Quality Assurance (QA) Support Plan. This section will describe all requirements for equipment, software, support, and documentation (technical orders (TO), manuals, and so forth) to meet the stated need within cost objectives. The plan will explain QA policies, procedures, and standards to be followed, reviews and audits to be conducted, and test-phase support to be provided (AFR 74-1, Quality Assurance Program).

3-17. Test and Evaluation Master Plan (TEMP). This section should initiate the development of a TEMP per AFR 80-14. The TEMP will:

- a. Identify the overall test and evaluation strategy.
- b. Describe the role of DT&E and OT&E.
- c. Identify the levels of testing (such as unit, integration, and systems performance) and conformance to objectives.
- d. Reflect performance objectives and evaluation criteria.
- e. Initiate other detailed test plans (such as development, software, validation, and hardware acceptance, and OT&E plan).
- f. Identify reporting requirements.

Section D—Concept of Maintenance

3-18. Preparation and Contents. The program manager will determine the need for a concept of maintenance according to guidelines in AFR 66-14, Equipment Maintenance Policies, Objectives, and Responsibilities. If a concept of maintenance is needed, the program manager should form a working group with key participants from operations, engineering, and logistics. The working group must tailor the maintenance concept to meet operational objectives using the ISD or HQ USAF PMD, concept of operations, and concept of engineering. The concept of maintenance will include:

- a. Reliability and maintainability.
- b. Maintenance requirements.
 - (1) Repair locations.
 - (2) Support and test equipment.
 - (3) Indirect maintenance.
 - (4) Technical data.
 - (5) Maintenance practices.
 - (6) Corrosion control.
 - (7) Maintenance skills and training.

(8) Calibration.

(9) Preventive maintenance.

c. Performance criteria.

(1) Response time.

(2) Repair time.

(3) Mean time between failure.

3-19. Support Plans. After the program manager receives the concept of maintenance, additional support plans may be needed to provide further detail and guidance. The ISPP briefly explains some of the support plans which may be needed.

3-20. Logistics Support Plan. The program manager, with the aid of the requiring command, O&M commands, and logistics support activities will determine how logistic support for the new information systems requirements will be provided. In many cases, AFLC provides equipment life cycle support for information systems equipment and AFCSC and the National Security Agency provide life cycle support for COMSEC equipment. In certain situations, the requiring command may provide life cycle support or the requiring command and AFLC may provide joint support (combined logistics support). AFR 400-26, Logistics Support for Ground Communications-Electronics (C-E) Systems and Equipment, gives guidance for selecting the means of logistics support for all new equipment regardless of initial acquisition cost. Based on the size, complexity, and scope of the program, the program manager will determine the level of detail needed in the logistics support plan. The following logistics assessment process will be used:

a. The logistics support activity (normally AFLC) will perform a comprehensive review of the logistics support requirements and will make sure that logistics actions agree with program milestones.

b. After completing the logistics assessment, the logistics support activity will give the program manager a written summary of their assessment including:

- (1) Equipment availability, leadtime, and ability to meet the ROD.
- (2) Availability of supplies and ISSL numbers.
- (3) Depot repair capability.
- (4) Availability of tables of allowance and test equipment list support.
- (5) Availability of TOs and assigned TO numbers or commercial technical data.

3-21. Maintenance Support Plan. The maintenance support plan is a formal document which may evolve from the concept of maintenance. It prescribes a plan of action for each significant maintenance task for the system throughout its life cycle. It explains the technical requirements, location, and frequency of the maintenance tasks. AFR 66-14 provides additional guidance for developing a maintenance support plan.

Chapter 4

FACILITY AND SYSTEM ACCEPTANCE, COMMISSIONING, AND REMOVAL

Section A—Inspecting Facilities and Systems

4-1. Introduction. This chapter tells how to accept and commission a facility or system. A series of actions leads from acceptance inspection through acceptance and pre-commissioning operational use to final acceptance and commissioning. Automated information system including those that operate at multiple sites, will be field-tested by at least one operational site using actual functional transaction data. The system will be determined functionally and technically adequate by appropriate authority before acceptance (section B). If the facility is part of a system this sequence may continue into system acceptance and commissioning. Not all of these actions are required in every case. The next several paragraphs describe these actions and explain exceptions. This chapter also covers actions needed to remove a facility or system from operation.

4-2. Acceptance Inspection. An acceptance inspection determines if equipment and software meet established technical and performance standards identified in the scheme instructions or contractual documents. The acceptance inspection consists of a review of the equipment and software test results, physical review of the installation, and check and verification of associated documents. An acceptance inspection is held immediately after the equipment and software tests. The inspection will be performed by representatives of the user, O&M, and engineering and installation activities as applicable. Other activities making up the team may include representatives of the ISRB, implementing command, requiring command, information systems O&M activity, base civil engineer, and contractor. The O&M activity representative will lead the inspection team. One set of inspection instructions will not cover all situations because of the variety of software and equipment configurations. Therefore, program managers must make sure each inspection is tailored to the particular program. The inspection team will decide what is to be reviewed and the sequence and depth of each part of the inspection.

4-3. Inspection Documents. The implementing command will provide appropriate documents such as those listed below to assist the inspection team:

- a. AF Form 1261, Information Systems Acceptance, Commissioning, and Removal Certificate, (figure 4-1) with blocks 1-9 completed.
- b. DD Form 250, Material Inspection and Receiving Report (DOD Federal Acquisition Regulation (FAR) Supplement, part 53).
- c. Annotated installation drawings.
- d. Cable distribution sheets.

e. Equipment performance records, test data sheets, and record of conducted tests.

f. Software test results.

g. Facility and system test logs.

h. Installation instructions and design performance standards.

i. Report from the appropriate medical office when X-radiation certification is required.

j. Radio frequency radiation profiles that show hazard limits and when radio frequency hazard certification is required.

k. Forms for transfer of installed equipment (when other than AF Form 1261 is used to transfer accountability for Air Force equipment management systems (AFEMS) equipment), residual materiel, and real property.

l. Any contractual documents.

4-4. Installation Exceptions. Exceptions are defects that prevent the facility or system from meeting the inspection criteria. They include faulty installation, errors in software, equipment failures, unsuccessful tests, or other faults. The following guidance applies:

a. **Major Exceptions.** These exceptions keep the facility or system from meeting the specified operational requirements. If the team finds such a fault, they will continue with the inspection as far as possible, then suspend the inspection and not accept the facility or system. The inspection team will formally notify the activity that must correct the exception. That activity will make the correction as soon as possible. The team will resume inspection when all major discrepancies are corrected. After the responsible activity has corrected major exceptions and the tests and inspection are completed, the facility or system will be accepted.

b. **Minor Exceptions.** These exceptions do not keep the facility or system from meeting operational requirements but keep it from meeting all inspection criteria. The inspection team will list minor exceptions that cannot be corrected immediately on the AF Form 1261. They will also list the activity that will correct the fault and the forecasted date for correction. The team chief will contact the program manager if doubt exists as to which activity is responsible for correcting discrepancies. As each minor exception is cleared, the O&M activity will provide a written release to the responsible activity and to the program manager and will annotate the AF Form 1261.

Section B—Accepting and Commissioning Facilities

4-5. Facility Acceptance. Completion of item 10, AF Form 1261, by the inspection team constitutes acceptance by the requiring and O&M commands. The installation team chief

INFORMATION SYSTEMS ACCEPTANCE COMMISSIONING AND REMOVAL CERTIFICATE						
1. DESCRIPTIVE TITLE OF FACILITY/SYSTEM USAF Academy Data Processing Support/Government Local Area Net Fiberoptics						
2. NAME OF HOST BASE USAF Academy, CO		3. NAME OF SITE AND LOCATION USAF Academy, CO		4. DATE INSPECTION COMPLETED 28 April 1989		
5. INFORMATION SYSTEM PROGRAM WHICH THIS FACILITY/SYSTEM IS AUTHORIZED ISRD USAFA USAFA 85-0124, Microcomputers in the Dormitories						
6. COMPLETE LIST OF RELATED SCHEMES OR CONTRACTS F191873-88-D-0005						
7. MAJOR ITEMS/SOFTWARE/COMMERCIAL EQUIPMENT INSTALLED OR REMOVED						
NSN/PN A	NOMENCLATURE B	QTY C	SHIPPING DOCUMENT D	CAP DSAP AUTH E	I/RT F	
ZF-120-22	H/Z-100 Desktop Computer	2,085	179809-01	B1	I	
H-125	Dot Matrix Printer	2,085	179809-01	B1	I	
LS-463-1	Lotus 1-2-3	2,085	179809-01	B1	I	
ES-463-1	Micro Stat, Version 2.3	250	179809-01	B1	I	
HSG-1121-22	Monochrome Graphics	250	179809-01	B1	I	
	Fiberoptic Cable	20	179809-01	828	I	
		miles				
8. EQUIPMENT MODIFIED None						
9. INSPECTION AND TRANSFER OF PROPERTY STATEMENTS						
X	A. The implementing command is not relieved of responsibilities required for system integration, dependent upon final test and acceptance of the subsystem, system, and supporting structures.					
X	B. The installation was tested per criteria established in the test plan. A flight check was made, if applicable. Test data are attached.					
NA	C. A report of measured X-radiation is attached.					
NA	D. An RF intensity plot is attached, indicating where RF energy exceeds the safety criteria of the AF Occupational Safety and Health (AFOSH) Standard 161-9.					
NA	E. The installation meets the criteria of NACSIM 5203. COMSEC account number: _____ applies.					
X	F. Accountability for all major items listed in 7 above has been transferred to FB 3010 in accordance with AFM 67-1, on CA/CRL document number: E247AN detail number: 0019/0020					
NA	G. DD Form 1354 has been completed to transfer real property.					
NA	H. A list of items excess to the installation has been provided to the base supply activity for inventory accounting and property disposition. Copy attached. Equipment items were disposed of per AFM 67-1					
NA	I. This form is for equipment removal only.					
X	J. AF Form 1318 has been submitted to the AFCC E-1 servicing activity.					
X	K. Action has been initiated to update the CAP/DSAP.					
NA	L. Additional remarks or continuation of items on the form are attached.					
X	M. Description of minor exceptions					
	System testing is required.		FORECAST DATE OF CORRECTION	RESPONSIBLE ACTIVITY	DATE CORRECTED	
			20 May 89	HQ AFCC	18 May 89	

AF FORM 1261
FEB 85

PREVIOUS EDITIONS ARE OBSOLETE.

Figure 4-1. Sample AF Form 1261, Information Systems Facility Acceptance, Commissioning, and Removal Certificate.

10. ACCEPTANCE CERTIFICATE				
An inspection and operational test has been conducted. Results of the inspection are listed in Item 9. Minor exceptions listed in Item 9M. If any, are accepted by signature of the responsible activity representative, below, for correction. The facility/system is accepted as being installed as planned and in accordance with established standards, and it performs according to established criteria and to the satisfaction of the undersigned.				
FUNCTION	ORGANIZATION	TYPED NAME, GRADE OR TITLE	SIGNATURE	DATE
A. O&M Activity	1876IS/CC	Robert T. Bell, Maj, USAF	<i>Robert T. Bell</i>	30 Apr 89
B. E-1 Activity	1839 EIG	George G. Hall, TSgt, USAF	<i>George G. Hall</i>	30 Apr 89
C. IBRS Chairperson	USAFA/CS	Glenda R. Rushing, Col, USAF	<i>Glenda R. Rushing</i>	1 May 89
D. Base Supply	7625LOG/LGSC	Billie C. Clark, Capt, USAF	<i>Billie C. Clark</i>	1 May 89
E. Quality Control	1876IS/LGMQ	Donald R. Ade, TSgt, USAF	<i>Donald R. Ade</i>	1 May 89
F. Base Civil Engineers	7625CES/DEM	Kathy N. Long, Maj, USAF	<i>Kathy N. Long</i>	1 May 89
G. TEMPEST Control Officer	NOT APPLICABLE			
H. Requiring Command	USAFA/CW	Charles A. Baker, Lt Col, USAF	<i>Charles A. Baker</i>	1 May 89
I.				
J.				
K. Base IS Staff Officer	USAFA/SI	Robert T. Bell, Maj, USAF		1 May 89
11. COMMISSIONING CERTIFICATE				
The undersigned have ascertained that all exceptions have been corrected. All operating and maintenance personnel, spare parts, test equipment, tools, expendable operating supplies, technical data, and other logistical support factors deemed necessary to meet the operational mission of the information systems facility/system are available.				
NA	A. Completion of this certificate effects the provisional commissioning of this facility as of _____ pending completion of system tests.			
X	B. Completion of this certificate effects the formal commissioning of this facility as of 20 May 1989			
FUNCTION	ORGANIZATION	TYPED NAME, GRADE OR TITLE	SIGNATURE	DATE
C. IBRS Chairperson	USAFA/CS	Glenda R. Rushing, Col, USAF	<i>Glenda R. Rushing</i>	20 May 89
D. Requiring Command	USAFA/CW	Charles A. Baker, Lt Col, USAF	<i>Charles A. Baker</i>	20 May 89
E. O & M Activity	1876IS/CC	Robert T. Bell, Maj, USAF	<i>Robert T. Bell</i>	20 May 89
REMARKS				
System and all interfaces operationally tested per contract requirements.				

AF FORM 1281, FEB 88 (Reverse)

Figure 4-1. (Continued)

may depart after blocks 10a, 10b, 10d, and 10e are completed and after information systems equipment, software, and real property are transferred. The information system O&M activity will obtain additional signatures required to complete the AF Form 1261, and forward the completed AF Form 1261 to the program manager. If there are minor exceptions, the installation is accepted by completing item 10 pending correction of all exceptions.

4-6. Precommissioning Operational Use. Circumstances may dictate operational use of accepted facilities before complete logistics support is available. In this case, the program manager will carefully assess support available against the operational need and decide how far ahead of commissioning the facility may be operated. The O&M activity assumes the risks associated with precommissioning operational use and accepts, in advance, logistics support delays resulting from the schedule deviation. The program manager will contact the program's administrative contracting officer and the AFLC program action officer to determine if logistics support can be accelerated to allow an earlier activation by obtaining spare assets from the contractor production line.

4-7. Commissioning Facilities. Facility commissioning places a facility into full operation. Commissioning certifies that a facility is completely installed, tested, and supportable in its operational environment. Support includes such items as TOs, commercial manuals, bench stock and supply spare parts, tools and test equipment, primary and backup power, assigned operating frequencies, utilities, trained personnel, and supporting services. The O&M activity must make sure that all exceptions have been corrected and that all essential support is available. If there are no minor exceptions and the commissioning criteria are met, the facility is commissioned by completing item 11 of the AF Form 1261. The program manager will make appropriate distribution of AF Form 1261 to include the installing activity. The program manager will transfer the requirements document and attachments, the AF Form 1261 and attachments, and all other life cycle documentation to the O&M activity upon final commissioning.

Section C—Accepting and Commissioning Systems

4-8. Prerequisites for Systems Tests. An information system consists of facilities (if applicable), equipment, material, services, and personnel organized to perform a clearly defined function to satisfy an established requirement. Sometimes facilities are separately installed, tested, and accepted or commissioned per Section B, pending completion of the systems tests. In some systems it may not be feasible to commission an otherwise operational facility before full operational system tests. In these cases, the facilities may be commissioned at the same time the systems tests are satisfactorily completed. Systems tests certify facilities are in compliance with system design criteria and mission requirements.

4-9. Systems Tests. The implementing command appoints a test director and the O&M command appoints an associate test director. Representatives of the installing and O&M activities, requiring command, and logistics command (when appropriate) will conduct the tests. If the system has been installed by contract, contractor representatives and the contracting officer representative will take part in the tests according to the terms of the contract.

4-10. Documentation of Systems Tests. The installing activity prepares AF Form 1261 when the tests are completed. The installing activity briefly identifies the facilities, subsystem, or system, lists the tests performed and notes any discrepancies found, and attaches copies of the system performance standards and test results. The installing activity notes deficiencies (failures to meet test objectives) in item 9, including the deficient items, proposed corrective measures, and the activity that must make each correction. The requiring command commissions the system in accordance with paragraph 4-12 after corrections have been made.

4-11. Systems Acceptance. Completion of item 10, AF Form 1261, by the inspection team constitutes system acceptance by the requiring and O&M commands. If there are minor exceptions, the system is accepted by completing item 10 of the AF Form 1261 pending correction of all exceptions.

4-12. Systems Commissioning. Systems commissioning places a system in full operation. Before a system may be commissioned, all deficiencies listed on AF Form 1261 must be corrected and all facilities making up the system must be commissioned. If a system was contractor-installed and the contractor failed to perform according to contract terms, the using activity may be entitled to liquidated damages. Volume II gives further guidance for recovering liquidated damages. Facilities which could not be commissioned until system testing may be commissioned concurrently with system commissioning. The O&M activity will complete item 11 of the AF Form 1261. The program manager will transfer the requirements document and its attachments, the AF Form 1261 and attachments, and all other life cycle documentation to the O&M activity upon final commissioning.

4-13. Facility or System Removal. To certify satisfactory removal of a facility or system the user, O&M activity, and ISRB representatives complete the appropriate sections of blocks 9 and 11 of the AF Form 1261. Removed ADPE must be placed in the reutilization program per paragraph 2-4(a)(2).

4-14. Distribution of AF Form 1261. The implementing activity sends one copy of each AF Form 1261 to the following:

- Each activity listed in item 10 of the AF Form 1261.
- Each activity that must correct deficiencies.
- Requiring activity programming activity.
- The information system program manager.
- Contracting officer.

Section D—Installation Team Control

4-15. Control of DOD Installation Team. The program manager controls the schedule of the installation team. The team normally departs the site when the facility is accepted. The program manager may also direct the team to depart before the installation is completed due to a prolonged work stoppage, to perform work with a higher priority, or for other valid reasons.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

JAMES H. DELANEY, Colonel, USAF

Director of Administration

SUMMARY OF CHANGES

This regulation updates and expands guidance to information systems program managers on developing and implementing information systems to satisfy validated or approved information systems requirements. It incorporates necessary changes to implement new information systems program management policies and procedures stemming from the consolidation of communications-electronics and automatic data processing.

4-16. Protecting Incomplete Installation. When a team must leave before an installation is complete, the installing activity and the host base prepares a letter of custodial agreement. This letter includes an agreement that the host base will protect the information systems equipment and installing team's tools and equipment left on site. The letter gives the reason the team is leaving and an estimated date when work will resume. The responsible property officer transfers all equipment and supplies to a representative of the host base on a temporary custody receipt for accountability and safekeeping.

CHARLES A. GABRIEL, General, USAF
Chief of Staff

Section C—Acquiring and Communicating Systems

4-8. Preparation for System Test. An information system consists of facilities (if applicable), equipment, materials, services, and personnel organized to perform a clearly defined function to satisfy an established requirement. Sometimes facilities are separately installed, tested, and accepted or commissioned per Section B, pending completion of the system test. In some systems it may not be feasible to commission an otherwise operational facility before full operational system test. In these cases, the facilities may be commissioned at the same time the system test is satisfactorily completed. Systems test criteria and mission requirements with system design criteria and mission requirements.

TERMS EXPLAINED

A1-1. Acceptance. Indicates a facility or system meets technical and performance standards but may have minor exceptions which do not keep the facility from meeting operational requirements (see *Commissioning*).

A1-2. Acceptance Inspection. Determines if the facility equipment and software meet technical and performance standards. This inspection is held immediately after facility and software testing and is documented on AF Form 1261.

A1-3. Activity. A unit, organization, or installation performing a function or mission.

A1-4. Automated Information System (AIS). A collection of functional user and information systems personnel, procedures, and equipment which is designed, built, operated, and maintained to collect, record, process, store, retrieve, and display information.

A1-5. Automatic Data Processing Equipment (ADPE). General-purpose, commercially available automatic data processing equipment and the systems created by them.

A1-6. Automated Data System (ADS). An assembly of procedures, processes, methods, routines, or techniques (including, but not limited to computer programs) united by regulated interaction to form an organized whole and specifically designed to make use of ADPE.

A1-7. Class I Change. A change that affects an approved schedule, cost, or baseline.

A1-8. Class II Change. A change that only affects the documentation or that is classified as maintenance.

A1-9. Commissioning. Certifies that a facility or system is completely installed, tested, operational, and supportable in its operational environment (see *Acceptance*).

A1-10. Concept of Operations. A verbal or graphic statement in broad outline of a commander's assumption or intent in regard to an operation or a series of operations. The concept of operations is frequently embodied in operations plans. The concept is designed to give an overall description of the operation and is included primarily for clarity. It is frequently referred to as the commander's concept.

A1-11. Data Systems Authorization Directory (DSAD). The official directory of HQ USAF-approved data systems descriptions with assigned data system designators and authorized for processing by Air Force activities. It is an inventory of authorized data systems and reflects Air Force activities authorized to process individual applications and the specific types of ADPE on which the applications are processed. Systems descriptions contained in the DSAD may

be for systems under development or in operation. The status of an individual system can be determined by the implementation schedule or the activities responsible for the design, implementation, and maintenance. The DSAD is published by the Data Systems Design Office.

A1-12. Economic Analysis. An analysis required by AFR 178-1 to determine the most cost-effective alternative for satisfying a requirement.

A1-13. Facility. A real property unit consisting of one or more of the following: building, structure, utility system, and pavement and underlying land.

A1-14. Information System Acquisition Program. A directed effort for the development and procurement of systems, subsystems, equipment, or software, as well as supporting equipment, systems, or projects, which is managed under the AFR 700-series regulations with the goal of providing a new or improved capability for a validated mission need.

A1-15. Information Systems Directive (ISD). A document developed and approved by the implementing command that identifies key decisions, assigns responsibilities, and authorizes specific resources and actions to develop and implement an information system.

A1-16. Information Systems Engineer. The individual responsible for conducting studies to determine the best way to satisfy a requirement and by selecting the best approach for integrating the design requirements into a total system configuration.

A1-17. Information Systems Program Plan (ISPP). The central plan which controls the program management effort.

A1-18. Information Systems Requirements Document (ISRD). The document which identifies and describes the need for information systems facilities, equipment, and services. It also identifies the initial technical solution, associated resources, and costs for fulfilling the need.

A1-19. Logistics Assessment. An assessment conducted during program management to determine equipment and logistics support availability and to determine actions needed to ensure full logistics support at program completion.

A1-20. Lowest Total Overall Cost (LTOC). The lowest total cost to the Government for a system over its full life cycle. It includes the cost of development, procurement, operation, support, and disposal.

A1-21. Operational Test and Evaluation (OT&E). OT&E is defined as the testing and evaluating conducted in as realistic

conditions as possible throughout the system's life cycle. Tests are conducted to verify that an information system is installed and capable of performing its operational mission as outlined in program documentation. OT&E is used to verify operating instructions, computer documentation, training programs, publications, and handbooks.

A1-22. Program. For the purpose of this regulation, program is defined as a formally documented plan to acquire new, additional, or expanded information systems resources or to remove specified resources in order to satisfy a requirement.

A1-23. Program Action Officer (PAO). An individual assigned to a program in response to the ISPP to coordinate all program-related actions assigned to their activity and to give status information to the program manager.

A1-24. Program Baseline. A three-part description of a specific program:

Part I—Requirements. A description of the operational and supportability needs that the program is directed, by PMD, to satisfy.

Part II—Content. A description of program performance, schedule, test, training, logistics, and so forth, to satisfy Part I requirements within the constraints of the funding shown in Part III.

Part III—Approved Funding. The total dollars identified for the program in the Congressional Appropriations Bill and the Five Year Defense Program as updated for the President's Budget.

A1-25. Program Baseline Document. A formal document that consists of a cover (signature) page, change log, and program baseline.

A1-26. Program Manager. The single individual in the implementing command with the full authority and responsibility for managing a program. There is only one program manager for a given program; however, a program manager may manage more than one program.

A1-27. Program Management. Coordinated actions that result in the application of resources to fulfill a stated need and the organized effort to provide equipment and software to meet a stated requirement.

A1-28. Program Management Directive (PMD). The official HQ USAF management directive used to provide direction to implementing, operating, supporting, and participating commands and to satisfy documentation requirements, request studies, and initiate, approve, change, transition, modify, or terminate programs. The content of the PMD, including required HQ USAF review and approval actions, is tailored to the needs of each program.

A1-29. Program Support Letter (PSL). A document prepared by the information systems program engineer which describes the equipment to be installed, sites agreed on, supporting construction, and services required and operational, technical, or other constraints affecting an information systems requirement. The PSL outlines responsibilities of the host base civil engineer, base information systems staff officer, and other supporting activities.

A1-30. Request for Service (RFS). A validated request for long-haul communications services or facilities prepared in telecommunications service request (TSR) format as prescribed in DCAC 310-130-1.

A1-31. Requiring Command. The MAJCOM that needs an information system, service, or capability to accomplish its mission.

A1-32. Scheme. A document prepared by the information systems engineer that translates a requirements document into the engineering, supply, and installation data necessary to establish or change an information system capability.

A1-33. System. Any organized assembly of resources and procedures united and regulated by interaction or interdependence to accomplish a specific set of functions.

INSTRUCTIONS AND FORMAT FOR THE INFORMATION SYSTEMS DIRECTIVE (ISD)

A2-1. General:

a. The information systems directive (ISD) documents key decisions, assigns responsibilities, defines program scope, and authorizes specific actions. The ISD is used to initiate or terminate an information systems program under AFR 700-4. ISDs are developed by the implementing command and are coordinated with all program participants before being formally issued.

b. ISDs will be prepared in the format indicated below. The level of detail in the ISD will be commensurate with the scope and complexity of the program. The paragraph sequence will be preserved.

A2-2. Format and Content:

a. Use the title, number, and date of the related requirements document.

b. Objectives. Clearly indicate the boundaries of the program to:

(1) Direct the development or modification of an information system or any element thereof.

(2) Designate functional managers as appropriate by the functional area.

(3) Appoint or direct the appointment of a program manager responsible for development and implementation of the information system.

(4) Direct the development of a program manager charter and ISPP.

(5) Conduct studies or requirement analyses to clearly identify a particular problem or deficiency.

(6) Direct actions relating to the selection and acquisition of information systems resources.

(7) Provide technical, acquisition, and managerial guidance and funding data related to the project.

(8) Delegate unique approval authority and establish dollar thresholds; for example, when the ISD is addressed to a program management office (PMO).

(9) Direct management reviews at selected milestones to be performed by the program manager with participation from other activities as required.

c. Program Participants and Tasking. Identify the program participants and specify their responsibilities, including the preparation of the ISPP. The following participants will normally be involved in most projects:

(1) The program manager. (PMO responsibilities will include approval authority delegated by HQ USAF.)

(2) Functional OPR.

(3) Design, development, procurement, and installation activities.

(4) Telecommunications support activity.

(5) Logistics activity.

(6) Security activity.

(7) Contractor officer.

(8) Training activity.

(9) Manpower activity.

d. Special Requirements. Criteria will vary depending on the project purpose, scope, cost, and complexity. Include the items below, if appropriate. (Other criteria may be added.)

(1) Legal, policy, or procedural constraints. (Indicate requirements to be satisfied. Specifically, include requirements that emanate from other Government agencies, DOD, or other Air Force functional areas. Include treaties or status of forces agreements with allied nations, if appropriate).

(2) Interface or integration. (Identify all other systems that will be affected. Define levels of interface and methods to be employed in achieving integration).

(3) Program management relationships. (Indicate the line of management responsibilities, such as PAO to program manager, program manager to organizational commander.)

(4) Security. (Indicate required security protection.)

(5) Prototyping.

(6) ADPE.

(7) Site preparation.

(8) Communications.

(9) Software.

(10) Training support.

(11) Configuration management.

(12) Privacy.

(13) Systems reviews and related reporting.

(14) Designation or required designation of user representatives authorized to conduct systems reviews and audits.

e. Financial Resource Considerations. Include program element code and element of expense identification code that provide resources and funding limitations, if appropriate.

f. Significant Milestones Anticipated in the Development. Significant milestones and related reporting criteria will be provided. These milestones will be refined in the ISPP. Identify those significant milestones which require economic analysis updating.

g. Other considerations.

h. Approval:

(1) Coordination by all program participants.

(2) Signature of the implementing command information systems staff officer.

PROGRAM MANAGER CHARTER

A3-1. General Information:

a. The program manager charter identifies the program and program manager, brings the supporting commands into the program, assigns general responsibilities, establishes milestones, and authorizes the resources required for program development and implementation.

b. The implementing command will prepare the charter in the format below and coordinate it with all activities involved before the charter is issued to the program manager.

A3-2. Format and Content:

a. Program Title.

b. Chartering Organization or Individual.

c. Purpose and Objectives.

d. Program Manager's Name, Office, and Telephone Number.

e. Scope and Applicability:

(1) References:

(a) ISRD.

(b) HQ USAF PMD or ISD.

(2) Authorities.

f. Guidelines and Constraints:

(1) Policies and regulations.

(2) Thresholds.

(3) Authorized waivers.

g. Program Manager Responsibilities:

(1) Fulfilling the need stated by the requirement document.

(2) Preparing the ISPP.

(3) Record keeping requirements.

(4) Reporting requirements.

(5) Reviews and audits.

(6) Actions required when cost, schedule, and performance thresholds are breached.

h. Program Manager Authority:

(1) Control and expenditure of resources.

(2) Channels of communications.

(3) Outside contacts.

(4) Use of telecommunications consultative services or commercial ADP.

(5) Approval levels.

i. Organizational Relationships:

(1) Program management team identification and organization (line and staff levels).

(2) Relationships to implementing organization and steering groups (organizational and functional lines).

(3) Location of program management organization.

j. Key Milestones.

k. Program Manager Resources:

(1) Budget.

(2) Facilities.

(3) Equipment.

(4) Materials.

(5) Personnel.

l. Signature:

(1) Program manager.

(2) Chartering official.

INSTRUCTIONS FOR COMPLETING AF FORM 1773, BASELINE CHANGE REQUEST (BCR)

Change Control Number: Enter the control number in accordance with local configuration management procedures (AFR 65-3).

Program Title: Enter the title of the program.

Date Submitted: Current date.

Originator: Enter name, office symbol, and telephone number of the change request originator.

Change Class: Refer to AFR 65-3.

Baseline(s) and Baseline Document(s) Requiring Change: Check the baselines or document affected by the change request.

Description of Change: Describe the requested change in sufficient detail to show project impact. Other pertinent facts may be attached.

Justification: Provide information specific enough to support the requested change. Avoid generalities.

Objectives and Benefits: Explain what should be achieved by this change. Quantify the expected results of this change in money, time, equipment, and so forth.

Project Impact: Enter information such as increased costs, schedule delays, product changes, and so forth.

Cost Estimates of Change: Provide estimated workhours the change will require. Show only costs incurred by the change and not total development costs. However, the total costs before this change may be shown for comparison purposes.

Developer Signature: The developer dates, signs, inserts office symbol, and checks the approval or disapproval block.

User Signature: The user dates, signs, inserts office symbol, and checks the approval or disapproval block. User signature is not needed for a Class II change.

Management Review: Enter the review that evaluated this change. The approval official signs, checks either the approval or disapproval block, and enters the date.

PROJECT TITLE		CHANGE CONTROL NUMBER		DATE SUBMITTED	
PROGRAM TITLE		ORIGINATOR NAME		ORIGINATOR OFFICE SYMBOL	
ORIGINATOR TELEPHONE NUMBER		CHANGE CLASS		BASELINE(S) AND DOCUMENT(S) REQUIRING CHANGE	
DESCRIPTION OF CHANGE		JUSTIFICATION		OBJECTIVES AND BENEFITS	
PROJECT IMPACT		COST ESTIMATES OF CHANGE		DEVELOPER SIGNATURE	
USER SIGNATURE		MANAGEMENT REVIEW		APPROVAL/DISAPPROVAL BLOCK	
TOTAL WORKHOURS		TOTAL COSTS		TOTAL DEVELOPMENT COSTS	
DATE		OFFICE SYMBOL		SIGNATURE	
7 Nov 85		0300/LB50		M. I. SCHIN	
DATE		OFFICE SYMBOL		SIGNATURE	
7 Nov 85		0300/LC0V		M. I. T. THOMAS	
DATE		OFFICE SYMBOL		SIGNATURE	
15 Nov 85		Lt Col P. K. DAVIS		OK Davis	

(Enter Unique Number
IAW Local Configuration
Management Procedures)

BASELINE CHANGE REQUEST (BCR)		CHANGE CONTROL NO. D76-222-1
PROJECT TITLE SUPPLY DETAIL RECORD MODIFICATION		DATE SUBMITTED 30 Nov 85
ORIGINATOR (Type or print name) Major T. W. Thomas	OFFICE SYMBOL DSDO/LGSMW	PHONE NO. 921-3416
CHANGE CLASS ☒ I ☐ II	BASELINE (S) AND BASELINE DOCUMENT (S) REQUIRING CHANGE ☒ FUNCTIONAL ☐ ALLOCATED ☐ FD ☒ ISPP ☐ RD ☐ OTHER (Specify) ☐ PRODUCT ☐ PS ☐ UM ☐ OM	
DESCRIPTION OF CHANGE (Describe in sufficient detail to allow determination of program impact.) Attach other pertinent facts. 1. Revises the ISPP in the following areas: a. Includes WRM details in the proposed concepts. b. Establishes the requirement to freeze single WRM, WRSK, MSK, Supply Point, and EAID details for special inventory. c. Excludes Reverse Post transactions from rejecting when the freeze code is present on the detail. d. Revises the concepts to require deletion of the freeze code on the detail record if a deployment/transfer occurs during inventory. 2. Proposed change pages to the ISPP. (Attachment omitted from example.)		
JUSTIFICATION (Be specific) This BCR documents the changes identified during the System Design Review, 15 Nov 85. Reference action items 14, 18, 19 and 22 or SDR approved minutes.		

AF FORM 1773
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Figure A4-1. Sample AF Form 1773, Baseline Change Request (BCR).

OBJECTIVES AND BENEFITS (In terms of money, time, equipment, etc.)

See attached changes to the ISPP.

(Attachment omitted from example.)

PROJECT IMPACT (such as increased cost, delays, product changes, etc.)

Minor redesign to Inventory Programs required. Work can be absorbed within current project costs and schedules, as identified in the ISPP.

(Do not list total development cost.)

COST ESTIMATES OF CHANGE			
	WORKHOURS	COMPUTER SUPPORT HOURS	
FUNCTIONAL ANALYST	10	No increase in present projections	
DATA SYSTEM ANALYST	15		
PROGRAMMER	35	OTHER COSTS	
OTHER		None	
TOTAL	60		
☒ APPROVED ☐ DISAPPROVED	DATE 3 Nov 85	OFFICE SYMBOL DSDO/LGSD	DEVELOPER (Type or print name) Maj M. L. Scott
☒ APPROVED ☐ DISAPPROVED	DATE 7 Nov 85	OFFICE SYMBOL DSD/LCSW	USER (Type or print name) Maj T. W. Thomas
☒ APPROVED ☐ DISAPPROVED	DATE 15 Nov 85	APPROVAL OFFL (Type or print name) Lt Col P. K. Davis	SIGNATURE OK Davis

Management Review (CCB or SDR) which evaluated this change.

Figure A4-1. Continued. Form 1774, Design Problem Report (DPR).

INSTRUCTIONS FOR COMPLETING AF FORM 1774, DESIGN PROBLEM REPORT (DPR)

Control Number: Enter the control number in accordance with local configuration management procedures.

Date Submitted: Current date.

Originator: Enter the name, office symbol, and telephone number of the originator.

Document: Identify the document in which the problem exists.

Page, Section, or Figure: Identify the specific reference in the document cited above.

Problem and Recommendation: Describe the problem and recommendation resulting from the review in enough detail for corrective action.

Action Category: Reviewing organization check one of four categories indicated.

Action Item Number: Number assigned (in accordance with local procedures) as a cross-reference to the minutes of the review.

Disposition: Indicate action taken or to be taken to resolve the DPR.

Date Closed: Self-explanatory.

ESTIMATED COST		WORK CLASS		DATE		APPROVED	
COMPUTER SUPPORT HOURS	15	15	15	15	15	15	15
OTHER COSTS	15	15	15	15	15	15	15
TOTAL	30	30	30	30	30	30	30
APPROVED BY: [Signature]		DATE: 1 Nov 85		APPROVED BY: [Signature]		DATE: 1 Nov 85	
APPROVED BY: [Signature]		DATE: 1 Nov 85		APPROVED BY: [Signature]		DATE: 1 Nov 85	
APPROVED BY: [Signature]		DATE: 1 Nov 85		APPROVED BY: [Signature]		DATE: 1 Nov 85	

AF FORM 1774

Management Review (100 or 200)
which evaluated the change

DESIGN PROBLEM REPORT (DPR)		Enter unique number IAM local configuration management procedures
ORIGINATOR (Type or print name, organization and phone no.)		CONTROL NO. 00123
Mr M. L. Harris, DSDO/LGSW, 921-5432		DATE SUBMITTED 1 Nov 85
DOCUMENT CEMS System Specification (Identify the document with the problem)	PAGE, SECTION OR FIGURE Page 3-4, Figure 3-2	
PROBLEM AND RECOMMENDATION (Describe in sufficient detail to allow for corrective action)		
Review of above document indicates that engine status and location data (from AF Form 1534) is not edited prior to updating the Engine Status and Location Master File. Edit requirements for this data are specified in the CEMS Concept of Operations, paragraph 3.2.1.1, page 3-11. Recommend the design specification be updated to include the required edits.		
(Use local procedures to cross-reference to the minutes of the review.)		
Reviewing Development Organization		
ACTION CATEGORY (Check one only)		ACTION ITEM NO.
☐ DESIGN ☐ INCORRECT ☒ INCOMPLETE ☐ EDITORIAL		15
DISPOSITION (List action taken or planned to resolve the stated problem.)		
Recommendation approved. Change pages to the CEMS System Specification to be distributed by 30 Nov 85.		
DATE CLOSED 3 Dec 85 (Change pages issued)		

AF FORM 1774
JUL 77

Figure A5-1. Sample AF Form 1774, Design Problem Report (DPR).

INSTRUCTIONS FOR COMPLETING AF FORM 1775, SOFTWARE PROBLEM REPORT (SPR)

Control Number: Enter the control number in accordance with local configuration management procedures.

Date Submitted: Current date.

TO: Enter the organization responsible for development or maintenance of the software.

FROM: Enter the initiating organization.

ADPS: Enter the number and title of the AIS of which the program is a part. (Refer to the DSAP).

Program Name: Enter the name of the program in which the problem or discrepancy was detected.

Program Identification: Enter the identification of the program involved.

Run Date: Enter the run date of the program in which the discrepancy or error was detected.

Point of Contact: Enter the name, grade, and telephone number of the individual most familiar with the problem in the organization initiating the SPR.

Problem Description: Describe the discrepancy or error. Tell what should have happened and the impact of the discrepancy.

Comments: Indicate the urgency of the correction and any other pertinent facts.

Problem Analysis: Describe the cause of the discrepancy or error, the impact, and any other programs or data bases affected.

Name of Analyst: Name, grade, and telephone number.

Recommended Action: Describe the proposed corrective action (if necessary), and provide an estimate of the time and resources required to correct the problem.

Approved or Disapproved: Check appropriate block.

Signature of Approving Official: Self-explanatory.

Date: Enter date of signature.

Action Taken: Tell what corrective action was taken.

Date Action Completed: Self-explanatory.

SOFTWARE PROBLEM REPORT (SPR)		DATE SUBMITTED 2 Dec 85	CONTROL NO. DSC-SC(AR)7102
TO: DSDO/SC Gunter AFS AL 36114-5000	FROM: HQ PACAF/SIDOB Hickam AFB HI 96853-5000	INFO COPIES TO:	
ADS 07	PROGRAM NAME NIHK00	IDENTIFICATION N/A	
RUN DATE 30 Nov 85	POINT OF CONTACT (Type or print name) Sgt R. L. Smith, AUTOVON 449-1893		
PROBLEM DESCRIPTION An attempt was made to execute program NIHK00. Execute card was prepared IAW para 4.1.4.1, AFM 171-112, Vol II. Upon execution, MCP displayed "***060/0 CRD CTL ERROR: INVALID SYNTAX." The characters behind the delimiter in CC-16, as prescribed in the manual, are 13 characters or 26 digits. MCP allowable positions in program parameter block are 24, BASE 8.+24. or from BASE 8 to BASE 31, the index registers. Program was executed using the insert parameter "IN 8 13 VA RWF1991 COBOLL".			
COMMENTS Attached is execute card which created the error. (Attachment omitted from this example.)			

Enter unique number
IAW local configuration
management procedures

AF FORM 1775
JUL 77

Figure A6-1. Sample AF Form 1775, Software Problem Report (SPR).

INSTRUCTIONS FOR COMPLETING AF FORM 770, (Rev. 1-81)

Control Number: Enter the control number in accordance with local procedures.

Date Submitted:

PROGRAM ANALYSIS

AFM 171-112, Volume II, contains a typographical error. Chapter 4, paragraph 4.1.4.1, Note 2, "keypunching a 1 in card column 23" should read "keypunching a 2 in card column 23."

FROM: Encl.

ADPN: Encl.

Program Name:

Program File:

Ref Date:

Point of Contact:

Problem Description:

Comments:

Problem Analysis:

Name of Analyst:

NAME OF ANALYST (Type or print)

SMSgt D. L. JOHNSON, AUTOVON 921-5432

RECOMMENDED ACTION

Correct documentation in next release. Initiator has been informed via telecon.

Approved by:

Signature of:

Date:

Action Taken:

Init Action:

☒ APPROVED☐ DISAPPROVED

DATE

15 Dec 86

APPROVING OFFICIAL (Type or print name)

Capt G. M. Carr

SIGNATURE

GMCarr

ACTION TAKEN

AFM 171-112, Vol II, Chapter 4, paragraph 4.1.4.1 updated with January release.

DATE ACTION COMPLETED

15 Jan 87

INSTRUCTIONS FOR COMPLETING AF FORM 1776, DATA BASE CHANGE REQUEST (DBCR)

Control Number: Enter the control number in accordance with local configuration management procedures.

TO: Enter the organization responsible for accomplishing the requested change.

FROM: Enter initiating organization and the name, grade, and telephone number of the individual in the organization who is most familiar with the request.

Date of Request: Current date.

Data Base Identification: Clearly identify the data base to be changed through implementation of the request.

Module(s) Affected: Identify all modules affected to make sure all necessary action is taken.

Form of Input: Check one. If "other," describe in REMARKS block.

Reason for Change: Clearly state reasons for the change in narrative format.

Remarks: Describe form of input if "other" is checked in FORM OF INPUT block, and any additional information which could assist in accomplishing the change.

Reviewing Official Approval of Change Implementation: The reviewing official completes this block when the change action is completed.

Engineering Change Implementation: This block is used to document the change action and the organization that authorized the change, and indicates whether the change was approved, rejected, or deferred. The reviewing official must sign and date this block.

REMARKS: Describe form of input if "other" is checked in FORM OF INPUT block, and any additional information which could assist in accomplishing the change.

LIST OF DATA ELEMENTS TO BE DELETED ATTACHED TO THIS REQUEST.

REVIEWING OFFICIAL APPROVAL OF CHANGE IMPLEMENTATION

DATE	10 May 84
TYPED OR REPRODUCED NAME	CAPT F. L. DODD
SIGNATURE	<i>[Signature]</i>

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Organization responsible for change		Enter unique number IAW local configuration management procedures	
DATA BASE CHANGE REQUEST (DBCR)			CONTROL NO. DSC-PR-1231
TO: DSDO/PR Gunter AFS AL 36114-5000		FROM: (Type or print name, organization & phone no.) Capt T. J. Robbins (AV225-4678) HQ USAF/PRE Washington DC 20330-5000	
DATE OF REQUEST 7 Nov 84			
DATA BASE IDENTIFICATION (Data Base to be changed by this request) BEAMS Real Property File			
MODULE (S) AFFECTED (Identify all) NATE20		FORM OF INPUT ☐ D/S INPUT REQUIREMENTS (AF Form 1330) ☐ DATA CARDS AND LISTINGS ☐ 80 COLUMN CODING SHEETS ☒ OTHER (Describe in remarks)	
REASON FOR CHANGE HQ USAF/PRE has determined RCS: HAF-PRE(AR)7116 report, USAF Real Property Projected Utilization Detail List, is no longer required. Data which is unique for this report should be deleted from the data base.			
REMARKS (Describe form of input if "other" is checked above; any pertinent facts that could assist in the change) List of data elements to be deleted attached. (Attachment not provided with this example).			
REVIEWING OFFICIAL APPROVAL OF CHANGE IMPLEMENTATION			
DATE 10 Nov 84	TYPE OR PRINT NAME CAPT F. L. DODD	SIGNATURE <i>F. L. Dodd</i>	

AF FORM 1776 JUL 77

U.S. G.P.O. 1977-261-301/1394

Figure A7-1. Sample AF Form 1776, Data Base Change Request (DBCR).

INSTRUCTIONS FOR COMPLETING AF FORM 1146, ENGINEERING CHANGE REQUEST/AUTHORIZATION

TO: Enter the organization responsible for accomplishing the requested change.

FROM: Enter initiating organization.

Change Control Number: Enter the control number in accordance with local configuration management procedures.

Status: Check appropriate block.

Originator: Enter the name, grade, signature, and telephone number of the individual in the organization who is most familiar with the request. Include the date the form was signed

Affected Documents: List the documents affected by the change request.

Number: List the applicable engineering scheme numbers.

I/RT Status: Insert "I" to indicate installed, "R" to indicate removed, and "T" to indicate relocated.

Reason for Change: Enter information sufficient to support the requested change. Avoid generalities.

Nature of Change: Describe the requested change in sufficient detail to determine project impact. Attach other pertinent facts.

Engineering Change Authorization: Enter the date the change was authorized, the organization that authorized the change, and indicate whether the change was approved, partially approved, or disapproved. Enter name, grade, signature, and telephone number of the approving official and date approved.

Comments: Include any additional comments relative to this action.

DATE 11 Dec 84		AUTHORITY EIC/EPPT	
NAME JOHN C. BLEASON Program Manager		SIGNATURE <i>John C. Bleason</i>	
DATE 4 Dec 84		DATE 4 Dec 84	
A copy of the base operations layout was obtained, marked up with the added item, and submitted to EIC. The control tower layout from scheme 0284800 should also be marked with the appropriate changes. 1 CY 3380 AEG/UE, Keefer AFB MS 39534-6140 1 CY 5022 12/XXR, Keefer AFB MS 39534-6340 1 CY 1859 EIC/EIF, Keefer AFB MS 39534-6340			

ENGINEERING CHANGE REQUEST/AUTHORIZATION				
TO: (Address of Engineering Control Office) EIC/EPPT Tinker AFB OK 73145-6343		FROM: (Address of Originating Activity) 1839 EIG/EIE Keesler AFB MS 39534-6340		1. ECR/A NO.
				2. STATUS ☐ EMERGENCY ☒ ROUTINE
3. ORIGINATOR				
TYPED NAME DENNIS M. POWERS EI Team Chief		SIGNATURE <i>Dennis M. Powers</i>	PHONE NO. AV868-3105	DATE 19 Nov 84
4. INSTALLATION CHANGE DESCRIPTION				
AFFECTED DOCUMENTS SOW para 3.6.2.3 CEFR B0000WD 274	NUMBER 0284A8D0	STATUS Installation	DATE 10 Nov 84	
5. REASON FOR CHANGE (Attach Additional Sheet, If Necessary) The Wind Transfer Panel was temporarily installed in Base Operations. The installation was due to the damage the Control Tower received during Hurricane Frederic. The Keesler Control Tower is not manned on a 24-hour basis, however, Base Operations is manned on a 24-hour basis. The Wind Transfer Panel was installed per applicable Standard Installation Practice Technical Order standards and is in the preferred place for the operations personnel. This Engineering Change Request/Authorization will not cause any additional expenditures of manpower or funds.				
6. NATURE OF CHANGE (Attach Additional Sheet, If Necessary) The scheme presently calls for the Wind Transfer Panel to be removed from base operations and installed in the control tower. This ECR/A is requesting the panel remain in base operations.				
7. ENGINEERING CHANGE AUTHORIZATION				
DATE 11 Dec 84	ORGANIZATION EIC/EPPT	ACTION ☒ APPROVED ☐ PARTIALLY APPROVED ☐ DISAPPROVED		
TYPED NAME JOHN C. GLEASON Program Manager		SIGNATURE <i>John C. Gleason</i>	PHONE NO. AV 735-4341	DATE 4 Dec 84
8. COMMENTS A copy of the base operations equip layout dwg should be obtained, marked up with the added item, and submitted to EIC. The control tower equip layout from scheme 0284A8D0 should also be marked with the appropriate changes. CC: 5 cys 1829 EIG/EIE, Keesler AFB MS 39534-6340 1 cy ATC/SI, Randolph AFB TX 78148-5000 1 cy 2052 IS/XRP, Keesler AFB MS 39534-6340 1 cy 3380 ABG/DE, Keesler AFB MS 39534-6340 3 cys EIC/EPPT, Tinker AFB OK 73145-6343				

AF FORM 1146
NOV 66

PREVIOUS EDITION WILL BE USED

GPO 615-520

Figure A8-1. Sample AF Form 1146, Engineering Change Request/Authorization.

